

nearly always the endeavour has been unsuccessful. As far as the members of the Trades' Association are concerned, there is greater willingness to work, I suppose because the affairs of the town more intimately concern them; whereas the Chamber of Commerce feel their interest greater in the work of the Port Commissioners. We have had many members of the Trades' Association who were willing to take as much part in municipal affairs as is necessary for the well-being of the Corporation: some of them indeed have done very good service. Of members of the Chamber of Commerce we have hitherto had few, for the reason that gentlemen engaged in business cannot afford the time. We have only had one member of the mercantile community who has really been able to be on the Municipal Corporation and to work successfully, and that was Mr. George Yule, and probably he was one of the best members we have ever had on the Corporation. If other members of the Chamber will pay the same amount of attention to the affairs of the Municipality as Mr. Yule did, it would be an enormous advantage to the Corporation. The Port Commissioners would probably elect commercial members of their body to represent them on the Corporation, and the Chamber would naturally feel bound to do the same. But there is considerable fear that two or three valuable votes might be lost, because if it turns out that out of the whole body not more than one or two can afford the time necessary to sit out meetings and give their votes on critical occasions, then the other seats will be wasted, or we should practically have the 25 nominated Commissioners reduced to 20. This is one practical difficulty which will in all probability arise. It has often happened that some one who seems likely to make a good Commissioner if he could only give the time necessary, is at first willing to do so, but when the time comes he finds that he has something more important to do. I have in my mind two or three instances of gentlemen who would have made most valuable members if they would only have attended, but experience proved that they would not. For that reason I would prefer that the Government should have the whole of the nominations, and I am quite certain that if only 4 or 6 gentlemen connected with the Chamber of Commerce could be induced to come forward, there would be no doubt of their being welcomed.

I am also bound to say that considerable weight is due to the argument that voluntary Associations do not always so fully represent the interests they are designed to represent. As far as the Trades' Association is concerned, we know that they have always represented the trading interest, but we know perfectly well that in the case of the Chamber of Commerce it has not always been so. Up to about two years ago four or five of the leading firms in commerce would not become members of the Chamber, and therefore they would not have been chosen to represent that body. And it is perfectly within the sphere of possibility that a time may come when the body, which is the lineal descendant of the present Chamber, may represent only a portion of the large and influential firms of the town; and if that should be so, you would put the elections into their hands and take it away from the others. For these reasons, I would prefer to see all the nominations left to the Government.

Then I come to what is by far the most important and the strongest argument of all, that though this system of special constituencies has a great deal to be said for it, if it is introduced it ought to be introduced on the grounds of the strictest equity to all; and I am constrained to say that so far as it appears to me this has not been done. I concur with Sir Alfred Croft that it is of no importance whether we have Mahomedans on the Corporation or not. They form a kind of middle party. In some respects Mahomedans naturally agree with Europeans, and in some respects they side with the Hindus. They are appealed to on both sides, as they are open to conviction, and the weight of their opinion is as often thrown on one side as on the other. They represent also a very important population of the town, and it is probably not incorrect to say that the people who carry on the minor descriptions of business in the town are very largely Mahomedans. And looking to the fact that under our elective system the Europeans get a proportion of members much larger than the Mahomedans do, the Mahomedans will more particularly suffer from the operation of the last clause of section 8. If any special constituencies are desirable, Mahomedans should certainly not be left out in the cold. I do think that it is extremely desirable that the Bill should go forth with the strictest appearance

of impartiality to all interests as far as possible, but I cannot say that this clause bears that stamp to my mind. All parties are satisfied with the Government nominations. The Corporation themselves, who have voted on this question twice, have almost unanimously expressed their preference for nomination by Government. There can be no possible question that the very last possible body that would be overlooked in nominations would be the commercial and trading interests. At the same time all would get their fair share, and there is no doubt the Mahomedans would feel their position more secure if the Government retain all the nominations in their hands. And to me it certainly does seem that if we are selecting special constituencies, to ignore Mahomedans is a flaw which I for one much regret.

HIS HONOUR THE PRESIDENT said:—I had not intended to take any part in the debate on this question, at all events at the present time. But from the remarks which fell from the last speaker, I presume that I should do well to explain my position in reference to this section. The section is one for disposing of a certain number of nominations which have hitherto been in the hands of the Government, and transferring them to certain elective bodies. My hon. friend Sir Henry Harrison said that he hoped the fact of his being the member in charge of the Bill would not be in any way a hindrance to his voting according to his conscience. I wish to make it clear that I am in no way the keeper of my hon. friend's conscience. But more than that, his remark induces me to state most distinctly that on this point I have not the slightest desire to influence any one's vote. My own position in reference to the point under discussion is one almost of indifference. I feel very much as Sir Richard Temple said when the question was originally before him—the question whether one-third or one-fourth of the Commissioners should be nominated—that he really cared neither one way or the other, and was quite willing to leave it to the Council to decide. The only purpose to which nomination could be properly put was to redress anything like a monopoly of representation. For that purpose I hold it to be a very valuable power in the hands of the Government. I cannot but feel the force of what the Chairman of the Corporation has said that the tendency will probably be for the majority of the elected Municipal Commissioners to become more and more the representatives of a single class. By "class" I do not mean either Hindu, Mahomedan or European, but people of one way of thinking and of one set of habits, and it is in that point that the danger of a tyranny of the majority is always more likely to lie. I should be anxious, in regard to municipal representation, as in political representation, to provide in a fair way for minorities, to introduce diversity of thought, in any bodies of this kind. If the elective representatives are all professional men, I should like to bring in representatives of the wealthier classes who are not willing to stand for election. If the whole were of one religion, I should like to bring in men of another religion. And the same as to particular interests. If the elected Commissioners represented one special interest, I should consider it my duty to nominate persons of another interest. But I quite agree with my hon. friend, Sir Alfred Croft, that the question ought not to be considered as a question of Europeans *quâ* Europeans, or Mahomedans *quâ* Mahomedans, or Hindus *quâ* Hindus. It is not from the point of religion, but from the point of view of earnestness of direction towards progress or towards reform which they would be likely to bring into the body of the Corporation that the question of what class a candidate belongs to has to be considered, and I think that is what my hon. friend, Sir Alfred Croft, meant, and that Sir Henry Harrison has a little misunderstood him. I must take the opportunity to say that I was sorry to see the remark made by the British Indian Association that the native Commissioners are to be repressed in every way, and that we are practically destroying the influence of the natives. Can anybody suppose that if the proposals made by the Select Committee are adopted, the influence of the native Commissioners will be in any way destroyed or repressed? I should have thought that had it been possible to have the heads of the great European firms as representatives of trade and commerce, it would be a help, a strength and an honour to the Corporation. My own fear is just the contrary, that you will never be able to get the representatives of commerce to go out of their way to bring their knowledge and practical ability to bear on the affairs of the town. I wish it could be otherwise.

To come back to this particular point, my own position is this. The proposal of the Select Committee will have the effect of whittling away to a certain extent the power of the Local Government in regard to making nominations, and for that reason I shall vote for it. I think that as time goes on, it will probably be found more and more possible to keep down the proportion of nominations left in the hands of the Government; but at the same time I am not insensible of the objections which have been brought forward to the proposals of the Select Committee as to their particular distribution. There is something in what was said that there is no guarantee that these bodies, whatever they may represent to-day, will represent the same interests hereafter. And if you once stereotype the particular distribution, you will have to go through a long and disagreeable process to alter it. At the same time the Select Committee have given the subject serious thought; and I am not sure that any better proposal can be made. It would be unseemly for me at least to vote for bringing the whole of the nominations back to the hands of the Government, but I have not the slightest wish to influence any hon. member from voting as he wishes.

The HON. MR. MACAULAY said:—After the speeches of His Honour the President and my hon. friend Sir Alfred Croft, I have little to say, as most of the objections which have been brought against the clause have been answered. I should like, however, to assure my hon. friend, the mover of the amendment, that there was not the smallest idea in the minds of those responsible for the framing of the clause of injuring the interests of Mahomedans; and I must say that I have had some difficulty in understanding how my hon. friend and the Mahomedan Literary Society have come to persuade themselves that there was any such idea. My hon. friend has expressed his high appreciation of the importance of commercial bodies in Calcutta, and of the benefit which the town has derived from commerce. Is he prepared to say that 10 is too large a number of Commissioners for Government to nominate to represent them, and if so, where is the danger to Mahomedans in reserving this number out of the 25 to commercial bodies? My hon. friend opposite, Dr. Gooroo Das Banerjee, said that the proposal is unnecessary, because no one has objected to the present system as unfair. He forgot, however, that it had been found to be inconvenient; and this brings me to my hon. friend Sir Henry Harrison's objection, which I myself consider the very strongest point in favour of the clause as it stands. Sir Henry Harrison argued that because hitherto, with one distinguished exception, members of the Chamber of Commerce have not regularly attended meetings, therefore there is a danger that those now to be elected by them will not, and that thus valuable votes will be lost. But would not the Chamber be more likely to find men among the commercial community willing to take a part in the management of the town than the Government? The objection to the present system is that Government has difficulty in finding men willing to be nominated, and that those nominated are unwilling to take a share in the work. I can say from my own experience that I have had, on the occasion of one vacancy, to write to four gentlemen in succession on behalf of Government before one could be found to fill it. I maintain that the Chamber will be better able than Government to find commercial men with a taste for Municipal work and a willingness to serve, and that those elected would feel a sense of responsibility which would impel them to discharge duly the functions entrusted to them. I therefore ask the Council to accept the clause as sound in principle and convenient in practice.

The HON. MR. MOORE said:—I beg leave to say a few words on this subject so far as it refers to the Chamber of Commerce. I support the hon. member who has just spoken in voting for section 8 entirely on the question of principle, in doing which I believe I am reflecting the feelings of the class I specially represent. As I understand it, the highest authorities in connection with this Bill have conceded that the paramount interests concerned are commercial, and there can be no doubt that the paramount commercial interests are those represented by the Chamber of Commerce. The hon. member in charge of the Bill has expressed a doubt whether the Chamber of Commerce will always fully represent these interests,

and he has quoted a precedent against it, the correctness of which I must admit. But it is my deliberate opinion that a similar state of things will never occur again, and that it may be accepted that the Chamber is, and always will be, thoroughly representative. The Hon. Babu Kali Nath Mitter has, however, twitted Europeans with shewing an indifference to municipal affairs amounting to cancelment of their claims for consideration; but I find in the papers before us innumerable memorials about this Bill from European Associations which I submit betoken a condition of active agitation totally incompatible with apathy. It has been further alleged that they show an unwillingness to serve as Commissioners, and in regard to this the Hon. Babu Kali Nath Mitter has said that they will never sacrifice five hours of their time discussing important affairs; but the view of Europeans is that the Municipality takes five hours to do what might be done in one, and what they will not do is to waste four hours of valuable time. This I know from personal experience has been the main cause which has deterred European merchants from accepting nominations to the Municipality. They are not backward when representatives are required to act upon the Committee of the Chamber, upon the Port Trust, and other commercial associations, all which represent public and not merely personal interests; but the predominant feature of these bodies is to get through the largest amount of work in the briefest space of time, and if a larger infusion of the European element will work a reform in this direction in municipal procedure, and bring the meetings of the Corporation into practical compass, I do not believe there will be any difficulty in getting merchants to do their duty as citizens in municipal matters as they do in reference to matters commercial.

The HON. THE ADVOCATE-GENERAL said:—It seems to me that this discussion is of very little importance after the declaration of the Hon. the President that he intends to support the amendment, because, under the existing law, the Local Government is competent to appoint ten Commissioners from the three bodies mentioned. He may make rules, and if representatives of the Chamber of Commerce and the other two bodies are selected according to such rules, His Honour may appoint them. Instead, however, of nominating members executive the Bill proposes to effect the same object legislatively. It is very important that commercial interests should be largely represented in the Municipal Corporation, and it becomes a small question whether the Government having made up its mind to appoint a certain number of commercial men did so under rules provided for their election, or gave these commercial bodies themselves directly the power to make the election. It is a question whether the power of the Government to nominate should in part be given over to three public bodies who possess and represent important interests in municipal administration. I often hear complaints made by different sections of the community as to the want of representation of particular sections of the community in the Municipal Corporation. We are not here to legislate on sentimental considerations, or to regard feelings in the matter; our duty is to constitute an administration which will be effective, and there is scarcely the slightest doubt that the commercial element is essentially necessary for administering the affairs of the town in which they must be very largely interested. That being so, and it being quite plain that members of the commercial community must be selected, what becomes of the argument of the hon. member who opposed the amendment that the Mahomedan community will suffer? The interests of the Mahomedans could not possibly suffer by the appointment of ten mercantile gentlemen. If there are Mahomedans who are largely interested in trade and commerce, their interests will be well represented by members nominated by the three public bodies. The objection that the Mahomedans will suffer in consequence of the commercial interest being represented as proposed is without foundation and a mere sentiment. If it be supposed that their interests will suffer, although we may regret the circumstance, we cannot let that consideration interfere with the admitted necessity of strengthening the commercial interest in the Municipal Corporation.

The HON. MR. IRVING said:—The Calcutta Trade Association has now been in existence upwards of fifty years, and no doubt its Members are all busy men; and though they have probably less time to spare than members

of the Chamber of Commerce, yet I am certain that many of them are quite willing to give up a certain portion of their time for a public purpose of this kind.

The HON. BABU KALI NATH MITTER said :—There seems to be some misapprehension on this subject. I have no objection to members of the commercial community being represented in the Municipality. All that I said on the last occasion was that if they took an interest in municipal administration, they would become valuable members. I was opposed to this proposal of the Select Committee on the ground that it would be an invidious distinction conferred upon a few public bodies out of a large number of similar Associations. As to the observation made by the hon. member in charge of the Bill that the Mahomedan community will suffer, I think it came from him in an awkward manner, seeing that he is the most enthusiastic supporter of the principle of plurality of votes which directly goes to the principle of election, and will operate to the detriment of that community. I think the Mahomedans may fairly say “Save us from our friend.”

The Motion being put, the Council divided :—

Ayes 5.

The Hon. Dr. Gooroo Das Banerjee
The Hon. Dr. Mohendralal Sircar
The Hon. Babu Kali Nath Mitter
The Hon. Moulvie Abdul Jubbar
The Hon. Sir Henry Harrison

Noes 8.

The Hon. C. H. Moore
The Hon. G. Irving
The Hon. Sir Alfred Croft
The Hon. T. T. Allen
The Hon. C. P. J. Macaulay
The Hon. H. J. Reynolds
The Hon. the Advocate-General
His Honour the President

So the motion was negatived.

The HON. DR. GOOROO DAS BANERJEE moved that in line 3 of section 8, for the word “resident” the words “residing or personally carrying on business” be substituted. He said :—On reasonable principles the grounds upon which one ought to be allowed the right to vote are—*first*, the payment by him of a certain rate of taxation, and *secondly*, his having an interest in the administration of the Municipality. Now, there may be many rate-payers who may pay a large amount of taxes to the Municipality, such as fees for licenses to carry on certain professions, and yet they may not reside in Calcutta in the strict sense of the term. So far as the first condition is concerned, viz., the payment of a certain amount of taxes, they evidently satisfy it. Then as to the second condition as to whether they have any interest in the administration of the Municipality although it may not be strictly true that they reside within the town, yet they may reside within it for 15 out of the 24 hours in the day. In such a case to preclude them from voting merely because they do not, in the strictest sense, reside within the limits of the Municipality would be hardly just. That is an anomaly which ought to be removed.

The HON. SIR HENRY HARRISON said :—I do not attach any very great importance to this question, but on the whole I think it better to leave the Bill as it stands. As long as the Suburbs and Calcutta were under entirely different bodies, a very large number of persons came into Calcutta from the Suburbs for purposes of business. Now, these persons will all be in Calcutta, and therefore the amendment will be almost inoperative; but under the amendment some persons living out of the enlarged Calcutta, such as at Howrah, or up the line would still get a vote for the business which they carry on in Calcutta, and it is on the whole but fair that those who do not reside within the limits of the Municipality should leave the administration of its affairs to those who do.

The Motion being put, the Council divided :—

Ayes 5.

The Hon. Dr. Gooroo Das Banerjee.
The Hon. Dr. Mohendralal Sircar.
The Hon. Babu Kali Nath Mitter.
The Hon. Moulvie Abdul Jubbar.
The Hon. Sir Alfred Croft.

Noes 8.

The Hon. C. H. Moore
The Hon. G. Irving.
The Hon. Sir Henry Harrison
The Hon. T. T. Allen
The Hon. C. P. J. Macaulay
The Hon. H. J. Reynolds
The Hon. the Advocate-General
His Honour the President

So the motion was negatived.

The Hon. MR. IRVING, in moving the omission of clause (f) of section 8, said:—The Amalgamation Committee, at page 9 of their Report, in speaking of the University, remark: “We do not say that the class who constitute it do not find adequate representation under the existing system, but the University has clearly a large interest in the metropolis, and it forms a most honourable and highly qualified constituency.”

There can be no doubt that most of the fellows and many of the graduates are already qualified in virtue of their being rate-payers. And although this is not the case with a certain proportion of the younger graduates, I can see no sufficient reason for giving them a vote apart from the primary qualification derived from the payment of rates. Graduates pass through the University annually in hundreds, and might, in course of time, if not immediately, cause a serious disturbance of the balance of voting power in certain wards.

I may remark that the Mahomedans are at one with the Europeans on this question, so that the proposal is refined down to a concession to the Hindus, who already possess so disproportionate a share of voting power. I therefore move that clause (f) of section 8 be omitted.

The Hon. SIR ALFRED CROFT said:—As I intend to support this amendment, I had better explain my reasons for doing so. It would be quite out of place for me to refuse, and I have no intention of refusing, any legitimate claim that may reasonably be put forward on behalf of fellows and graduates of the University. But I have not been able to satisfy myself that this particular claim is a reasonable one. No question of course can arise as to the fitness of graduates to vote, and no one can dispute that they would vote with intelligence and discretion. I am sure that the tendency of the graduate vote would be to return as Municipal Commissioners men of high character and position. But it seems to me that the question is not solely one of fitness. I doubt whether the question is at all one of fitness directly. The question of fitness does not enter into those which I consider the leading clauses of this section, clauses (a) to (e), which give the right to vote to the owner and occupier of houses, to those who pay rates and taxes, and to those who carry on any trade or business; and these I conceive to be the only true and safe principle on which to proceed in deciding the qualifications for a voter. Clause (f) proceeds on an entirely new, and as I consider, a wrong and faulty principle. It is this: that the persons who pay the taxes are not competent to decide how those taxes should be spent without calling in men of superior learning to help them. Or else it means that men of superior learning have a claim to dispose of funds to which they themselves have not contributed. I quite agree that it is possible to conceive cases where the possession of a degree might reasonably be held to give a man the right to vote, for instance, in the election of members of Parliament, where the questions for consideration are the most weighty and varied that men can have to deal with. But when, twenty-five years ago, an attempt was made to introduce the Graduate vote, the sense of the nation at once rejected it as a ‘fancy franchise.’ It seems to me that the only safe principle, beyond which it is dangerous to go, is to give the right to vote according to the interest which the voter has in the prosperity of the town and the development of trade and commerce. It may be said that the vote may safely be conceded to graduates, because they are a very deserving and enlightened class of men. But cases may arise very soon where giving the graduate vote might cause injustice. Section 36 of the Bill defines the objects upon which the municipal fund is to be spent, and I believe that under one of its clauses the establishment and maintenance of free libraries might possibly be included. Again, there is an amendment before the Council in favour of supporting schools for primary and technical education. Both these objects I consider not only laudable, but entirely within the scope of a Municipality; and it is pretty certain that the Graduate vote would generally be given in their favour. But I hold that we are not entitled to call in the assistance of the Graduate vote. For if free libraries are to be established, or primary and technical schools to be maintained, the persons who should decide this question are those who will have to pay the bill and no others.

But putting aside the question of principle, I come to the form which the clause assumes. The qualification is given to fellows and graduates. Now the corresponding clause in the Bengal Municipal Act gives the franchise to

graduates and licentiates of any English or Indian University; but that form is not adopted in the present Bill. The Bill proceeds on the assumption that fellows and graduates of the University of Calcutta have in some way a close connection with Calcutta. That position I cannot accept. The University of Calcutta is not localised in that way. If it has any local existence, it exists wherever its influence extends; that is to say, wherever its affiliated Colleges are situated, wherever its examinations are held, wherever its graduates reside. It is true that the Senate House of the University is situated in Calcutta. The Senate House does not belong to the University, but to the Government. Still, in so far as the University pays rent in the sense of providing for the repairs of the building, and also pays the municipal taxes, the University as such might claim a vote in consequence of such payments. In that point of view there was in the first draft of the Bill, according to which graduates were to vote in the ward in which the Senate House is situated, some slight and far off connection with the leading principle of the Bill; though giving a vote or ten votes to the University is a very different thing from giving it to the hundreds if not thousands of University Graduates who reside in Calcutta. But in the present draft the vote is given to graduates for any ward in which they reside; and thus the last thin link of connection with the principle of the Bill is snapped. You give the qualification for learning alone and for nothing else. If that is so, I must protest altogether against the Graduate vote being limited to graduates of the Calcutta University. Why should not the Universities of Bombay and Madras be included? Why not include graduates of the Universities of Oxford and Cambridge, in which the standard of learning is not lower than in the University of Calcutta? These objections, it is true, are met by an amendment of the hon. member opposite. But there are others no less cogent. There are many men of learning in Bengal whose learning was acquired at a period prior to the establishment of the Calcutta University. If so, why not give a vote to those senior scholars who, to the same amount of learning, have added age and experience? Again, in determining the franchise for a Municipality, the very persons who might be expected to exercise the vote with the greatest benefit to the public would be those who have taken degrees in Medicine and Engineering. The questions with which a Municipality is chiefly concerned are questions of health and engineering, such as water-supply and drainage. And yet because the University, by a slight and trifling technicality, calls such persons licentiates and not graduates, they will be excluded from the franchise and not be allowed to vote. To give exceptional privilege to graduates in Arts and Law, subjects with which the Municipality is not concerned, is not consonant with sound principle.

THE HON. SIR HENRY HARRISON said:—I think that so far as this clause stands it is a matter of small importance. Its present value entirely arises from the principle which it involves, whether you will allow intelligence to be a qualification for voting, or must you insist on the payment of rates also. My hon. friend, Sir Alfred Croft, has admitted that graduates will probably give a very good vote indeed. My view is that when we are looking for constituencies to elect members, we want constituencies which will return good members. Generally speaking we want to combine intelligence with wealth. Intelligence without wealth is not a desirable factor. Wealth without intelligence is also undesirable, because all the proceedings of the Municipality are conducted in English. But where you have a high standard of intelligence, an exception may be made. To omit this clause will be to place high intelligence in a more illiberal position than elsewhere. I find in the Bill now before the Bombay Legislature that they propose to give two members to the fellows of the University alone, as well as votes in the wards to all graduates. With regard to the argument that we have left out licentiates and also graduates of other Universities, I have not the slightest doubt that every member of the Council who will vote for the clause in this Bill will welcome the addition of such voters if any one proposes it. The proposal which at one time was mooted of giving members to the University did not find favour. Then it was proposed to give graduates votes in the ward in which the University is situated, but it was objected that the effect would be to turn out the other members of that ward. If we leave this clause out of the Bill, we shall be admitting

ourselves to be more illiberal towards education than is the case in Bombay or in the mofussil municipalities, and I shall be sorry if that is done.

The HON. DR. GOOROO DAS BANERJEE said:—I oppose this amendment, because the arguments in support of it are based on the erroneous assumption that in allowing graduates to vote, we shall be allowing persons to vote who are in no way connected with the payment of taxes. A graduate may be contributing to taxation, but yet not up to the minimum amount prescribed by the Bill. In most cases he does satisfy the condition of being a rate-payer, only not to the minimum requirement. The possession of a degree which is a sure test of intelligence should be taken, in the case of a graduate, to supplement the deficiency in the other qualification, viz., the paying of rates. The two taken together should make up for him what is made up in other cases by the payment of a certain minimum rate of taxation.

The Motion being put, the Council divided:—

Ayes 6.

The Hon. C. H. Moore.
The Hon. G. Irving.
The Hon. Sir Alfred Croft.
The Hon. T. T. Allen.
The Hon. C. P. L. Macaulay.
The Hon. H. J. Reynolds.

Noes 6.

The Hon. Dr. Gooroo Das Banerjee.
The Hon. Dr. Mohendralal Sircar.
The Hon. Babu Kali Nath Mitter.
The Hon. Moulvie Abdul Jubbar.
The Hon. Sir Henry Harrison.
The Hon. the Advocate-General.

The numbers being equal, the President gave his casting vote with the *ayes*.

So the motion was carried.

The Council was adjourned to Saturday, the 11th February, 1888.

GORDON LEITH,

*Offg. Asst. Secy. to the Govt. of Bengal,
Legislative Department.*

CALCUTTA; }
The 14th February, 1888.

ILLUSTRATION OF REPORTS BY MAPS.

REVENUE DEPARTMENT—MISCELLANEOUS.

Calcutta, the 8th February 1888.

RESOLUTION.

Read—

A circular issued by the Government of India, Revenue and Agricultural Department, No. 64G, dated the 2nd November, 1882, containing a proposal to insert maps in administration and other reports to illustrate the questions discussed therein.

Read also—

Letter from the Government of India, Home Department, No. 22—749, dated the 23rd May, 1883, with enclosure.

Resolution, dated the 10th June, 1884, issued by this Government to the Board of Revenue, Lower Provinces, and the Heads of Departments, calling upon them to consider how skeleton maps could best be utilised to show, by shades of colour or in other ways, such administrative features as might in their opinion be conveniently illustrated by means of maps.

Letter from the Sanitary Commissioner, Bengal, No. 2930, dated the 4th December, 1882.

Letter from the Protector of Emigrants, No. 1925, dated the 6th December, 1882.

Letter from the Director of Public Instruction, Bengal, No. 7294, dated the 28th December, 1882.

Letter from the Director of the Department of Land Records and Agriculture, dated the 29th August, 1887.

Letter from the Board of Revenue, Lower Provinces, No. 361B, dated the 3rd May, 1887.

Letter from the Board of Revenue, Lower Provinces, No. 449A, dated the 28th June, 1887.

As far back as in 1882 the Government of India, in their Resolution of the 2nd November of that year, quoted in the preamble, suggested the more general use in Administration Reports of illustrative maps corresponding in size with the pages of the reports themselves. The Survey Department, it was ascertained, were prepared to supply skeleton maps of the kind required, and the Board of Revenue and the Heads of Departments in these Provinces were requested to consider what features of the administration dealt with by them could best be indicated in the manner proposed.

2. The Lieutenant-Governor considers that the object in view is a desirable one, and has determined to give immediate effect to the suggestion made by the Government of India. The replies of the Officers and Departments consulted are generally in favour of the proposal, but it has been urged by the Board of Revenue that it is calculated to occasion delay in the submission of reports and to entail considerable expense. With regard to the anticipated delay, the Lieutenant-Governor, however, is of opinion that, if the preparation of the maps be taken in hand with forethought, not when the reports which they concern are complete, but as soon as the statistics which they are designed to illustrate have been compiled, there will be no difficulty in submitting them in proper time, and it must be clearly understood that the dates hitherto prescribed for the submission of reports must continue to be adhered to. It may on occasion be found necessary to despatch the maps at a later period to be bound up with the reports, but this procedure should be entirely exceptional, and is to be avoided. In the matter of expense it must also be distinctly understood that no addition can be made to existing departmental grants on this account, and that whatever is done must be done within the limits of budget provision.

3. Sir Stuart Bayley does not desire to indicate once for all any stereotyped plan on which maps should be prepared, but must leave it to the Heads of Departments themselves freely to use their discretion in the matter, so as to illustrate by this means the special features of the particular branch of administration treated during the year under report. The person writing a report will generally be the best judge of the question what statistical information can on each occasion be embodied in maps with the greatest advantage. It may be observed that the Sanitary Commissioner proposes to indicate, by shades of colour or other appropriate devices, the extent to which operations have been

carried on in different localities, the progress of disease, the intensity or persistency with which it has prevailed, the local circumstances which have influenced its prevalence and procedure, its effect on the population, and other cognate matters; while the Director of Public Instruction desires to show the general spread of education as tested by the proportion of scholars to population, the spread of secondary and higher education on the same principle, the spread of secondary and higher education among Muhammadans, and the spread of female education. These suggestions are cited as illustrations of the principle on which the maps should be prepared.

4. For the purposes above set forth, it is thought that maps of the Province on a scale of 80 miles to the inch, or of 64 miles to the inch, are quite sufficient. Either of these scales should be adopted, and it is desirable that one or other of them should be used in preference to any larger scale which would involve the folding up of, and less ready reference to, the maps. In certain cases it may not be practicable to show what is aimed at with distinctness except on a larger scale, but ordinarily the 80-mile or 64-mile scale should suffice, and no map of these Provinces on a larger than the 32-mile scale should accompany the annual report of any Department.

5. The Board of Revenue and the Heads of all Departments will be authorized to indent direct on the Survey Department for their requirements, and the latter will be requested to make arrangements to supply such indents as speedily as possible.

ORDER—Ordered that the Resolution be published in the *Calcutta Gazette*, and that copies, with copies of the correspondence annexed, be forwarded to the Board of Revenue, Lower Provinces, and the Heads of Departments for information and guidance, and to the Surveyor-General for information.

Ordered also that a copy be forwarded to the Government of India, in the Home and Revenue and Agricultural Departments, for information, with reference to the Resolution in the latter Department No. 64G, dated the 2nd November 1882.

By order of the Lieutenant-Governor of Bengal,

P. NOLAN,

Secretary to the Government of Bengal

APPOINTMENT OF A COMMITTEE TO CONSIDER THE QUESTION OF
IMPROVING THE POSITION OF THE JUNIOR MEMBERS OF
THE PILOT SERVICE, AND THE QUESTION OF THE
COMPULSORY RETIREMENT OF PILOTS ON THEIR
ATTAINING THE AGE OF 55 YEARS.

MUNICIPAL DEPARTMENT—MARINE.

Calcutta, the 9th February 1888.

RESOLUTION.

READ—

The following Resolutions recorded by the Government of Bengal, sanctioning a revised scale of tonnage among the various grades of the Pilots:—

Resolution dated 19th September 1881.

Ditto 29th January 1885.

Ditto 25th May 1887.

Demi-official letter from the Government of India, dated the 4th October 1887, requesting that the opinion of the Port Commissioners may be taken on the proposal to reduce the term of service in the Junior Master's grade from five to three years.

Letter No. 2109, dated the 13th December 1887, from the Port Commissioners, submitting their opinion on the proposal.

Letter No. 3389, dated the 3rd August 1887, to the Government of India, transmitting a memorial from Mr. R. M. Daly, Senior Branch Pilot.

Letter No. 247, dated the 16th January 1888, from the Government of India, sanctioning the extension of the service of Mr. R. M. Daly, Branch Pilot, for six months.

The following letters from the Port Officer, Calcutta, submitting representations from certain Junior and Senior Masters and Mate Pilots on the subject of their grievances:—

No. 4996, dated 12th December 1886.

„ 59, „ 6th January 1887.

„ 69, „ 6th January 1887.

In the letter to the Government of India, cited above, No. 3389, dated the 3rd August 1887, the distinction between 'Service' and 'Licensed' Pilots is explained with special reference to the application of the 55 years' retirement rule. The pilots commonly known as 'Service' Pilots are members of the Covenanted Bengal Pilot Service, and are permanent servants of Government. They were at first paid fixed salaries, but were afterwards allowed to exchange these for a percentage of the pilotage fees earned by them, and those of them who did so were said to have "gone on the free list." All the Service Pilots are now paid in this manner. They are also compelled to retire at the age of 55 under a stringent rule which permits them to retain office only in special cases with the sanction of the Secretary of State.

The position of the Licensed Pilot Service is quite different. This portion of the service was established in 1856, because the members of the regular service were unable to cope with the work. They have no privileges as regards pension or allowances when on leave, and they did not receive their licenses for any particular term of years. Although, however, the licenses may be technically revocable, Government has respected their claims as far as possible, and has passed rules for the purpose of equalising promotion in the two branches. There is no actual rule necessitating the retirement of these pilots at any particular age, but the practical effect of the orders which have been passed in particular cases has been to extend to them the general rule applicable to the Uncovenanted Service, under which the retirement of an officer is not enforced if the Lieutenant-Governor considers him fit to perform his duty.

3. The annual report of the Port Officer for 1886-87 shows that for the last 10 years the average tonnage of the shipping visiting the Port has increased, while the average number of vessels visiting the Port has decreased. A comparison of the two quinquennial periods—1877-78 to 1881-82 and 1882-83 to 1886-87—shows that the average tonnage of vessels entering the Port rose from 1,567 tons in the former to 1,870 tons in the latter period; while on the other hand the average number of vessels entering the Port fell from 1,058 to 1,038. In the year 18-6-87 the average tonnage of vessels entering the Port was 2,002, while the number of vessels was 1,020. This increase in the average tonnage, combined with the decrease in the actual number of ships, has necessarily given an increasing share of the work to the senior pilots; and while the position of the junior pilots has grown steadily worse, the higher grades, or at least the Branch Pilots and the elder members of the Senior Master grade, have been earning large incomes. Nor is this inequality in earnings the only evil result; for the juniors, by this enforced idleness, are likely to lose their knowledge of the river, and their confidence in handling a ship. A remedy for this state of things has twice been sought in a redistribution of tonnage amongst the different grades of pilots. The following table shows the alterations which have been made:—

	Tonnage up to 1881	As fixed in 1881	As fixed in 1887
	Tons.	Tons	
Branch Pilots . . .	Above 1,600	Above 1,700	2,000 tons and upwards
Senior Masters . . .	800 to 1,600	801 to 1,700	900 to 2,000 tons.
Junior " " " " . . .	Up to 800	801 to 1,350	900 to 1,450 .
Mates " " " " . . .		Up to 800	11 to 900 .

The Committee appointed in 1881 also showed that 60 pilots would be sufficient to work the shipping in the Hooghly, and suggested that from 1886 the number should be reduced to that number. This suggestion, which commended itself to the Lieutenant-Governor, was approved by the Government of India.

4. The last redistribution of tonnage took effect from the 1st February 1885; but it is clear from the subjoined table that the increase in the average tonnage of the ships has more than counterbalanced the effects of it:—

YEAR	Number of vessels of the tonnage available for the grade	Average monthly number of vessels actually piloted by each pilot	Number of pilots at work on 1st January excluding special pilots	AVERAGE MONTHLY EARNINGS OF AN INDIVIDUAL OF EACH GRADE FOR EACH MONTH OF ACTUAL WORK	
				Service.	Licensed
BLANCH PILOTS				Rs	Rs
1884	927	5	10	1,302	1,406
1885	765	5.1	10	1,285	1,219
1886	869	5.6	10	1,576	1,194
1887	1,028	6.6	9	1,111	1,639
1888	..	..	10	..	..
SENIOR MASTERS.					
1884	359*	3.18	23	775	585
1885	573	3.17	27	801	658
1886	647	3.93	22	965	820
1887	625	3.63	18	994	822
1888	..	..	23	..	..
JUNIOR MASTERS.					
1884	324	1.92	8	Nil	385
1885	285	1.94	5	Nil	365
1886	316	2.6	6	512	491
1887	188	2.26	7	359	438
1888	..	..	4	..	..
MATES					
1884	221	3.1	6	312	Nil
1885	304	2.7	4	267	Nil
1886	281	2.3	8	295	Nil
1887	291	2.10	9	291	Nil
1888	..	..	8	..	..

* The Senior Masters may, however, pilot also the vessels shown as available for the Junior Masters' grade.

For the purpose of improving the position of the Junior Masters and the Mates, the time of service in the Junior Master's grade has been reduced from 5 to 3 years; while Government has undertaken to pay the actual expenses, within certain limits, of Mate Pilots proceeding to the Sandheads in search of work. It is clear, however, from the figures given above, that much more than this is required. The Lieutenant-Governor has accordingly decided to refer the whole question for consideration and report to a representative Committee, to be constituted as follows:—

The Hon'ble H. J. Reynolds, C.S.I., Chairman of the Port Commissioners, Calcutta	...	...	...	Chairman.
Mr. J. L. Mackay, nominated by the Bengal Chamber of Commerce.	}	Members.		
Captain A. W. Stiffe, Port Officer, Calcutta.				
Mr. F. T. Rayner, Senior Master Pilot.				
„ F. T. Paine, Mate Pilot.				

As the Government of India has desired that the question of compulsory retirement raised in Mr. Daly's case should be considered in connection with these questions, this subject also will form the subject of a report by the Committee.

By order of the Lieutenant-Governor of Bengal,

COLMAN MACAULAY,
Secretary to the Govt. of Bengal.

Rainfall, Weather, and State and Prospects of the Crops.

Statement showing Rainfall, Weather, and State and Prospects of the crops in the different districts of Bengal, as reported to Government during the week ending the 11th February 1888

No	District and date of return.	Rainfall at Sudder Station in inches	Character of the weather and state and prospects of the crops
BENGAL.			
Western Districts			
BURDWAN DIVN.	1 Burdwan, Feb 11, '88	0.52	Weather cloudy and cold Prospects of winter crops not Press stationary
	2 Bankoora „ 11, '88	0.88	Weather—old since rainfall Harvesting of mustard and pulses has commenced Rain has been very beneficial to wheat, barley, gram and cotton No appreciable change in the rice market
	3 Bishnupur „ 11, '88	1.06	Weather cooler. <i>Rabbi</i> has been benefited by rain Sugarcane is being cut and pressed
	4 Brierbloom „ 11, '88	0.31	Weather—cloudy and hot at the beginning of the week cold after the rain. <i>Boro</i> cultivation going on Prospects of winter crops good
	5 Midnapur „ 11, '88	1.56	Weather cloudy and wet Ploughing of rice lands now going on <i>Rabbi</i> harvest progresses with good outcome especially of sugarcane
PRESIDENCY DIVN.	6 Hooghly „ 11, '88	1.13	Weather—cloudy and cold during the first part of the week cloudy and rainy during the latter part Harvesting of <i>amun</i> over Cutting of sugarcane continues Prospects of winter crops satisfactory
	Howrah „ 13, '88	1.14	
	Oodabutta „ 13, '88	0.35	
	Central Districts		
	7 24-Pergha Feb 14, '88	1.65	Weather—cloudy and rainy Harvesting of <i>amun</i> nearly over Prospects of winter crops satisfactory Ploughing continues Manufacture of sugar still going on
PRESIDENCY DIVN.	8 Nuddea „ 11, '88	0.65	Weather—cloudy, but reasonable Prospects of <i>rabbi</i> good
	9 Mcherpur „ 11, '88	0.70	
	10 Choondanga „ 11, '88	0.25	
	11 Ranaghat „ 11, '88	0.21	
	12 Khoolna „ 11, '88	0.75	Weather—cool on account of rainfall Harvesting of <i>amun</i> and transplantation of <i>boro</i> in some complete Prospects of winter crops good
PRESIDENCY DIVN.	13 Jessore „ 11, '88	1.11	Weather—cloudy with showers of rain in the latter part of the week Harvesting of <i>amun</i> crop is over Winter crop doing well.
	14 Bongong „ 11, '88	0.12	
	15 Moorshedabad „ 11, '88	0.57	Weather—cloudy <i>Rabbi</i> crops promising Rain has benefited all crops on the ground
	16 Lalbagh „ 11, '88	0.55	
	17 Kandi „ 11, '88	0.58	
RAJSHAHY DIVN.	18 Jungipur „ 11, '88	0.18	
	19 Dinagpur Feb 11, '88	Nil	Weather—warm during early part of week latterly cold Harvesting of winter rice almost over Prospects of standing crops good Price of rice remains stationary
	20 Rajshahye „ 11, '88	0.55	Weather—somewhat cloudy for the last three or four days Prospects of <i>rabbi</i> crops good Harvesting of <i>ganga</i> going on with good prospect More rain is wanted for standing crops
	21 Rungpur „ 11, '88	0.09	Weather—unsettled and very cold Harvesting of crops on the ground except tobacco which is doing well
	22 Bogra „ 11, '88	0.50	Weather—reasonable Slight rain on the 9th and 10th C.H.W. crops promise well Price of rice stationary
RAJSHAHY DIVN.	23 Panna „ 11, '88	0.81	Weather—rainy during the latter part of the week Prospects of <i>ganga</i> crops good
	24 Darjeeling „ 11, '88	0.81	Passing showers Six inches of snow fell in the station on the 11th State and prospects of crops good
	25 Julpigoree „ 11, '88	0.15	Weather—mornings foggy in the beginning of the week latterly cloudy Harvesting of winter rice over, outcome ten to twelve muns Prospects of cold weather crops continue good Common rice sells at 20s per muns at the Sudder station
Eastern Districts.			
DACCA DIVISION	18 Dacca, Feb 11, '88	0.61	Weather—cloudy and cold Ploughing and sowing of <i>amun</i> in progress Winter crops doing well outcome expected to be good Land is being ploughed.
	19 Fariadpur „ 11, '88	0.69	Weather—cloudy Rain on the 10th. Prospects of standing crops good
	20 Goulundo „ 10, '88	0.15	Weather—reasonable Prospect of crops continues good
	21 Backorgunge „ 10, '88	Nil	Weather—cloudy and cool State and prospects of all crops satisfactory
	22 Mymensingh „ 10, '88	Slight rain	
CHITTAGONG DIVN.	23 Chittagong Feb. 14, '88	0.29	Weather—variable Prospects of crops good Price stationary
	24 Nonkolly „ 10, '88	Nil	Weather—reasonable, latter end of the week cloudy and warm <i>Rabbi</i> crops doing well
	25 Tipperah „ 9, '88	Nil	Weather—cold and reasonable and occasionally cloudy Lands are being prepared for <i>amun</i> and jute crop In places harvesting of <i>rabbi</i> crops is going on. Prospects excellent
	26 Chittagong Hill Tracts „ 7, '88	Nil	Weather—cold in the morning and hot at laytime Harvesting of mustard is almost finished Condition of all existing cold weather crops is generally good Pressing of sugarcane continues
	27 Hill Tipperah „ 8, '88	Nil	Weather—cold Sugarcane is still being cut Tobacco and mustard doing well.

No	District and date of return	Rainfall at Sudder Station in inches	Character of the weather and state and prospects of the crops
BIHAL			
PATNA DIV.	26 Patna	Feb 11 '88 Nil	Weather—cool and cloudy Prospects of spring crops continue favourable Poppy in flower and promises well Prices of food grains stationary.
	27 Gaya	, 11, '88 Drizzling rain	Weather—cold Threshing of paddy almost finished Rubbi progressing tolerably well Opium is being extracted
	28 Shalabad	, 11 '88 0.01	Weather cloudy and exceedingly cool Prospects of rubbi crops continue hopeful, though some apprehension is entertained on account of cloudy weather In places harvesting has commenced State of the poppy crop is excellent in spite of unfavourable weather the collection of opium has begun and the outturn is reported to be good
	29 Darbhanga	11 '88 Nil	Weather—occasionally cloudy Rubbi prospects continue very favourable Mustard and tobacco are being harvested Lands are being prepared for indigo Prices stationary
	30 Mozuffarpur	, 11 '88 Nil	Weather—mostly overcast and cold with strong westerly wind now clear and seasonable Prospects of crops including poppy fair but cloudy weather was unfavourable to rubbi crops generally and strong west winds to poppy
	31 Samt	, 11 '88 Nil	Weather—cloudy with occasional sunshine Prospect of all crops continues good
BHOJPOUR DIV.	32 Champaran	11 '88 Nil	Weather—overcast and foggy in the first part of week, latterly cool and clear Prospects of rubbi and poppy continue favourable Aihai doing well
	33 Mounseer	Feb 11 '88 0.0	Weather—seasonable, cold and cloudy at the latter part of the week Prospects of rubbi crops continue good Poppy in flower and promises well
	34 Bhagalpur	11 '88 Nil	Weather—cloudy with west wind Standing crops doing well Wheat and barley would be benefited by a shower of rain
	35 Patna	, 11 '88 0.06	Weather cloudy and cold Outturn of winter crops reported to be good and not good from different parts
	36 Moudia Shalabad	11 '88 0.11 0.08 0.10	Weather cold and cloudy Harvesting of <i>Kharif</i> and mustard nearly completed with good outturn Prospects of rubbi crops good Transplantation of <i>ba o</i> paddy continues Common rice selling at an average of 24 annas per rupee
	37 Southal Parganas Patna	, 11 '88 0.16 0.1	Temperature rising Weather cloudy towards end of the week with slight showers Rain beneficial Prospects of winter crops fair In Rajahmundry 12 anna crop is expected Sugarcane is being planted out in Goida In west of the district there are very few crops on the ground
ORISSA			
CUTTACK DIV.	38 Cuttack	Feb 10 '88 Nil	Weather—fair Reaping of <i>saral</i> completed with fair outturn <i>Dalua</i> rice is growing well Common rice sells at 20 annas per rupee in town Last night's rain (not shown in this return) has facilitated ploughing
	39 Puri	9 '88 Nil	Weather—seasonable Land is being ploughed <i>Dalua</i> (spring crop) is doing well Common rice 21 annas 17 chittacks in the Sudder sub-division and 23 annas 15 chittacks in the Khorda sub-division
	40 Balasore	10 '88 1.52	Weather cloudy and getting a little warm Threshing of paddy continues Rubbi is still being gathered Prospects of other spring crops favourable They will be benefited by the recent rainfall
CHOTA NAGPORE			
<i>South West Frontier Agency</i>			
CHOTA NAGPORE DIV.	41 Hazratnagar	Feb 10 '88 0.11	Weather—cloudy and cold Rain on the 9th. Cloudy weather is not favourable to wheat, which is approaching maturity, and to mango which is about to be in blossom Rubbi is expected to yield between 6 annas and 8 annas Rain has done good to sugarcane on the ground Poppy doing well Cattle-disease continues to be reported
	42 Lohardugga	11 '88 0.71	Weather—cloudy and cold More rain expected which is likely to do damage to the standing rubbi crops Land is being ploughed Market steady.
	43 Singbouda	, 10 '88 1.18	Heavy rain fell yesterday (9th February) Weather bright and clear to-day Rain has fallen all over the district Cotton is doing well Outturn of gram expected to be from 6 to 8 annas, and of <i>dal</i> , mustard, and linseed from 6 to 12 annas Cattle disease reported from thanas Bahangora and Khursowah
	44 Manikpura	, 11, '88 1.19	Weather—cloudy, damp and cold Rain has facilitated ploughing for next season Outturn of sugarcane is good; will probably be a bumper. Rice selling at from 16 to 21 annas per rupee

Published for general information.

CALCUTTA, REVENUE DEPT.,
The 14th February 1888.P. NOLAN,
Secy to the Govt of Bengal.

Results of the Meteorological Observations taken at the Alipore Observatory from 5th to 11th February 1888.

Month.	Date	Maximum in sun.	Number of hours of bright sunshine	Mean pressure barometer at 3 P.M.	TEMPERATURE				HYGROMETRY				WIND		Rain.	WEATHER.
					Mean	Maximum	Range	Minimum	Mean wet bulb	Vapour tension	Dew point.	Humidity.	Prevailing direction	Miles recorded.		
1888		O		Inches	O	O	O	O	O	Inches	O	%			Inches	
Feb	5th	131.8	10.2	29.976	71.8	82.3	19.2	61.1	66.1	0.577	63.0	73	S W by S and WNW	46	Nil	Chiefly clear, p.
"	6th	132.2	10.7	30.011	69.9	78.5	16.3	62.2	63.8	.480	57.8	67	NNW and calm	86	"	Clear, p.
"	7th	133.5	10.3	30.1	67.3	78.3	19.0	59.1	59.1	.391	52.1	62	NNW and S by W	64	"	Chiefly clear, p.
"	8th	137.0	7.0	30.0	66.9	79.5	21.2	55.3	59.7	.429	54.1	67	S and calm	48	"	Chiefly cloudy, p.
"	9th	118.0	1.0	29.980	61.1	74.7	16.3	55.1	59.6	.451	56.2	77	SSW and variable	115	1.19	Chiefly, S, d, p., <, p.
"	10th	131.1	8.5	29.955	63.3	72.4	11.5	57.1	59.0	.441	55.6	77	WNW, NW by N and variable	114	1.11	Chiefly cloudy, S, S, p.
"	11th	132.5	10.7	29.981	61.7	75.6	22.1	55.5	58.8	.418	51.0	68	SW and SW by S	76	Nil	Chiefly clear, p.

The mean pressure of the seven days	...	...	Inches.
The average pressure of the corresponding period for 24 years, S. G.'s Office	...	...	29.996
The total number of hours of bright sunshine	...	...	Hours.
The maximum possible number of hours of sunshine	...	...	58.4
The mean temperature of the seven days	...	...	O
The average temperature of the corresponding period for 24 years, S. G.'s Office	...	...	66.9
The extreme variation of temperature	...	...	70.7
The maximum temperature	...	...	28.8
	...	...	82.3
The highest velocity of the wind in one hour	...	...	Miles.
	...	...	15
The highest pressure of wind on one square foot	...	...	lbs
	...	...	Not measurable.
The mean relative humidity	...	...	%
The average relative humidity of the corresponding period for 24 years, S. G.'s Office	...	...	71
	...	...	70
The total fall of rain from 5th to 11th February 1888	...	...	Inches.
The average fall of the corresponding period for 24 years, S. G.'s Office	...	...	1.60
The total fall from 1st January to 11th February 1888	...	...	0.44
The average fall of the corresponding period for 24 years, S. G.'s Office	...	...	2.52
	...	...	0.91

The mean pressure, temperature, &c., are deduced from the traces of the Barograph and Thermograph, and from observations made at 6h, 10h, 16h, and 22h.

The maximum and minimum temperatures are obtained from self-registering thermometers. All the thermometers are verified, and the readings have been corrected to a standard constructed and verified at the Kew Observatory. They are exposed under a thatched shed open at the sides, and are suspended four feet above the ground.

The barometer readings are corrected approximately to those of the standard Newman's No. 86, formerly at the Surveyor-General's Office.

The hygrometric elements are obtained from Tables III, IV, and V of the official tables computed in the Meteorological Office, and based on Regnault's modifications of August's formula.

The directions and the movement of the wind are taken from the trace of a Beckley's anemograph.

The mouth of the rain-gauge is one foot above the ground.

o overcast, g gloomy, d drizzling rain, t thunder, p passing temporary showers, < lightning, - fog, a dew.

A. PEDLER,

For Offg. Meteorological Reporter to the Govt. of India

* METEOROLOGICAL OFFICE, GOVT. OF INDIA;

* Calcutta, the 13th February 1888.

Meteorological Report of the Province of Bengal

METEOROLOGICAL DIVISION.		DISTRICT	Representative station.	STATION OBSERVATIONS.												
				AIR PRESSURE.			WIND.		TEMPERATURE.							
				Mean barometric height, 10 A.M.	Mean reduced to sea-level.	Variation from mean.	Prevailing direction.	Mean wind velocity.	Highest during week.	Date.	Lowest during week.	Date.	Mean maximum temperature.	Mean minimum temperature of week.	Mean daily temperature of week.	Variation from normal mean of week.	Mean 10 A.M. temperature.
ORISSA.	Pooree	Gopalpore	30.029	30.079	+0.016	Calm	18.50	82.2	6th Feb.	66.2	4th Feb.	80.3	70.1	75.2	+3.2	77.1
		False Point	30.071	30.093	+0.031	variable.	19.50	86.4	6th	59.0	10th	80.9	65.2	73.0	+1.1	75.1
	Cuttack	Cuttack	30.005	30.088	+0.038	Easterly	38.0	91.9	6th	59.8	10th	87.2	67.6	77.4	+2.3	77.6
	Balasore	Balasore	30.027	30.087	+0.027	N.E. N.W.	92.4	86.4	6th	66.5	10th	82.5	62.7	72.6	+2.6	76.6
	South-West Midnapore	Sanger Island	30.071	30.098	+0.053	NNW	19.0	84.2	6th	57.4	8th	78.7	63.3	71.0	+0.4	71.0
SOUTH-WEST BENGAL.	South 24-Pergunnahs															
	Midnapore	Midnapore	29.951	30.106	+0.041	N	84.1	88.3	5th, 6th Feb.	56.2	10th	83.5	64.8	72.2	+3.9	73.3
	24-Pergunnahs															
	Howrah	Calcutta	30.067	30.089	+0.006	Westerly	75.0	82.5	6th	55.3	8th	79.1	59.2	69.2	—	70.1
	Hooghly															
	Burdwan	Burdwan	29.985	30.089	+0.009	NW	53.0	84.5	6th	53.3	8th	83.1	68.3	69.2	+1.1	69.1
	Bankura	Bankura	29.756	—	—	WNW	16.0	82.1	5th	55.8	10th	77.3	58.9	68.1	—	67.3
	Beerbhoom	Ranegunge	29.751	30.075	+0.035	WNW	101.9	86.9	5th	54.2	7th, 8th Feb.	80.0	57.2	69.0	+2.4	71.0
	West Burdwan															
	Moorsheadabad	Berhampore	30.017	30.087	+0.027	North-westerly.	65.5	84.6	6th	51.2	7th	78.6	55.7	67.2	—0.2	69.0
EAST BENGAL.	Nuddea	Krishnagar	30.006	30.071	—	WNW	72.1	83.9	6th	43.9	8th	79.7	53.9	65.8	—	70.0
	Jessore	Jessore	30.056	30.091	+0.036	Westerly	5.4	83.7	6th	51.5	8th	80.6	56.1	68.4	+0.7	70.7
	Khoolna															
	Chittagong	Chittagong	30.008	30.101	+0.018	Variable.	55.0	80.6	7th	55.6	4th	78.6	58.8	68.7	+0.2	69.0
	Chittagong Hill Tracts	Demagiri														
	Backergunge	Barrisal	30.069	30.082	+0.058	Calm	60.2	81.3	6th	53.1	8th	78.3	58.5	68.4	+2.5	69.1
	Noakholly	Noakholly	30.037	30.082	+0.035	Calm	80.9	79.3	10th	50.8	8th	78.3	56.8	67.6	+1.3	72.1
	Furzedpore	Furzedpore	30.054	30.095	+0.040	NW	47.0	81.5	6th	49.8	8th	76.5	55.0	64.9	+1.8	67.0
	Dacca	Dacca	30.062	30.075	+0.034	Calm	55.0	83.1	6th	52.2	8th	80.2	56.1	68.2	—0.1	70.1
	Comillah	Comillah	30.054	30.091	+0.052	NE	47.6	84.4	6th	50.1	7th	79.8	55.0	67.4	+1.1	68.1
NORTH BENGAL.	Mymensingh	Mymensingh	30.027	30.087	+0.039	SE	68.1	78.2	5th	48.1	7th	76.7	52.9	64.8	+1.1	65.9
	Bogra	Bogra	29.979	30.044	—	Calm	67.5	83.3	6th	48.4	8th	78.2	52.0	65.6	—	68.0
	Pubna	Sonmugunge	30.003	30.071	+0.036	SW	48.5	85.6	6th	47.1	8th	78.9	49.9	64.4	+2.2	67.0
	Rajshahye	Rampore Behar	29.997	30.069	+0.050	SW	68.3	81.2	6th	47.7	8th	78.6	52.0	64.3	+2.3	70.1
	Maldah	Maldah	30.017	—	—	NW	86.3	78.5	9th	47.1	7th, 8th Feb.	77.0	52.9	65.0	—	74.2
	Dinagore	Dinagore	29.952	30.057	+0.014	SE	101.0	80.7	6th	46.8	8th	77.3	52.4	64.9	+4.1	70.1
	Kumgore	Kumgore	29.928	30.068	+0.016	W	102.0	79.5	6th	47.0	8th	76.1	51.5	63.8	+3.9	67.0
	Julpigoree	Julpigoree	29.770	30.073	+0.035	North-easterly.	17.9	75.9	6th	47.0	7th	73.5	51.6	62.6	+2.9	67.0
	Cooch Behar															
	Darjeeling Hill Tracts	Darjeeling	22.942	—	—	Calm	55.0	49.3	4th	28.8	10th	44.5	33.0	38.8	+1.2	49.0
NORTH BHAR.	Purneah	Purneah	29.948	29.081	+0.017	WNW	18.7	79.2	5th, 6th Feb.	44.9	7th, 8th Feb.	74.1	49.5	61.8	—1.0	65.1
	North Bhagulpore															
	Mozufferpore	Mozufferpore														
	Darbhunga	Darbhunga	29.858	30.075	+0.009	WNW	152.0	75.2	6th	52.2	7th	71.9	54.4	63.2	+0.8	62.0
	Chumparan	Mothari	29.816	30.054	+0.012	W	208.3	78.0	5th	45.4	9th	72.4	48.7	60.0	+1.8	64.0
	Sarun	Chapra	29.876	30.081	+0.021	WSW	158.1	79.0	6th	47.1	10th	73.2	52.1	62.7	+1.9	63.0
		Dehree	29.715	30.087	+0.034	SSW	234.6	80.0	6th	43.5	10th	73.3	56.1	64.7	+3.0	67.0
	Shahabad	Buxar	29.852	30.107	+0.039	WNW	161.9	77.9	6th	46.9	10th	72.6	52.8	63.7	+1.4	67.0
		Arrab	29.866	30.073	+0.029	W, WNW	126.4	78.5	6th	45.9	10th	73.7	51.7	62.7	+1.8	67.0
	Gya	Gya	29.681	30.078	—0.005	W	112.5	83.4	6th	52.0	10th	78.6	56.6	67.1	+1.4	67.0
SOUTH BHAR.	Patna	Bankipore	29.807	30.090	+0.021	W	100.3	78.1	6th	45.8	10th	73.6	51.7	62.7	—0.2	67.0
	South Bhagulpore															
	Monghyr	Bhagulpore	29.900	30.069	+0.029	W	112.0	79.9	6th	40.0	7th, 8th Feb.	75.3	53.7	64.5	+2.7	68.0
	Sontal Pergunnahs	Dooinka	29.650	—	—	NW	117.3	83.6	6th	49.6	8th	78.3	53.9	66.1	+2.2	68.0
	Hazribagh	Hazribagh	28.037	80.112	+0.051	W	276.1	79.9	5th	45.8	10th	72.6	51.7	64.2	—1.5	67.0
	Lohardugga															
	Manbhoom	Ranchee	27.878	30.071	+0.005	NW	160.5	81.5	6th	40.5	10th	74.6	54.6	64.0	+2.5	67.0
	Singbhoom	Chyabassa	29.280	—	—	SSW	33.9	87.4	6th	54.4	10th	81.6	58.2	69.9	+2.9	67.0

Explanation.—Summary.—The normal means of air pressure and temperature are the arithmetical average or means of the reading during the same period for the last 10 years. The humidity of the atmosphere is expressed as percentage, saturated air being represented by 100. A clear sky is denoted by c and an overcast sky by th. The numbers are the numerical means or average of the rainfall in that district determined from the returns sent in by the sub-divisional stations for the period in question during the year. The station in the district sending in returns divided by the number of stations. A rainy day is one on which at least hundredth of an inch fell.

or the week ending Friday, the 10th of February 1888.

DISTRICT OBSERVATIONS.															Representative station	DISTRICT.	METEOROLOGICAL DIVISION.		
Average humidity at 4 A.M.	Average cloud amount at 10 A.M. for week.	Rainfall of week at observatory station	OF WEEK.		RAINFALL.						Average number of rainy days	Number of days with rain							
			Mean of 10 days	Normal mean	Since 1st of January			Since 1st May 1887											
					Mean of district	Normal mean	Variation	Mean of district	Normal mean	Variation									
73	51	Nil	—	—	—	—	—	—	—	—	—	—	—	—	Calcutta	OBISRA.	Puricoe		
77	64	0.0	—	0.17	—	0.21	—	—	—	—	50.71	—	—	0.3	Ides Point			OBISRA.	Cuttack
70	64	0.0	—	0.14	—	0.17	—	—	—	—	51.42	—	—	0.3	Cuttack				
61	11	2.41	1.72	0.23	1.72	0.10	11.2	11.83	—	—	51.50	—	1.7	0.6	Balasore	OBISRA.	South West Midnapore		
61	11	1.62	2.20	0.50	2.20	0.60	11	11.4	—	—	51.21	—	1.87	0.7	Saugor Island			OBISRA.	South West Midnapore
52	17	1.70	1.5	0.40	1.7	0.19	11.1	11.88	—	—	51.07	—	1.7	0.5	Midnapore					OBISRA.	Midnapore
57	14	1.60	1.5	0.47	1.5	0.19	10.6	11.10	—	—	52.89	—	1.7	0.8	Chittagong	OBISRA.	Howrah		
47	17	1.08	0.97	0.1	0.1	0.18	10.11	11.21	—	—	47.19	—	1.7	6.6	Burdwan			OBISRA.	Burdwan
51	16	0.00	0.1	0.12	0.8	0.14	10.72	11.15	—	—	52.1	—	1.0	0.4	Bankura					OBISRA.	Bankura
48	19	0.14	0.1	0.11	0.70	0.10	10.11	11.71	—	—	52.86	—	1.8	0.7	Raniganj	OBISRA.	West Burdwan		
55	11	0.5	0.17	0.1	0.17	0.1	11.11	11.11	—	—	50.17	—	1.7	0.6	Barhampton			OBISRA.	Moushahabad
1	5.7	0.63	0.16	0.14	0.11	0.16	10.1	11.01	—	—	49.94	—	1.6	0.1	Krishnanagar					OBISRA.	Nuddea
70	3.7	1.11	0.74	0.10	0.1	0.14	10.8	11.2	—	—	54.10	—	1.3	0.1	Jessore	OBISRA.	Jessore		
77	5.1	0.10	—	—	—	—	—	—	—	—	111.96	—	—	—	Chittagong			OBISRA.	Chittagong
64	2.3	0.18	0.1	0.17	0.1	0.1	10.01	11.7	—	—	78.71	—	1.0	0.1	Dumra					OBISRA.	Chittagong Hill Tracts
67	5.0	0.11	0.0	0.1	0.1	0.1	10.1	11.9	—	—	110.14	—	1.0	0.2	Barisal	OBISRA.	Barisal		
55	1.1	0.61	0.8	0.14	0.1	0.12	10.16	11.11	—	—	56.81	—	1.0	0.2	Nakhal			OBISRA.	Farrukpur
50	3.1	0.14	—	0.18	—	—	—	—	—	—	61.1	—	—	0.1	Dacca					OBISRA.	Dacca
66	2.9	0.17	—	0.20	—	—	—	—	—	—	71.8	—	—	0.2	Comilla	OBISRA.	Comilla		
44	4.0	0.18	0.11	0.20	0.11	0.12	10.1	11.8	—	—	18.00	—	1.0	0.6	Mymensingh			OBISRA.	Mymensingh
78	1.4	0.51	0.8	0.13	0.8	0.12	10.16	11.11	—	—	77.38	—	1.1	0.2	Barisal					OBISRA.	Barisal
75	1.6	0.11	0.1	0.27	0.1	0.1	10.1	11.1	—	—	51.28	—	1.0	0.2	Satgaon	OBISRA.	Satgaon		
53	0.6	0.14	—	—	—	—	—	—	—	—	51.78	—	—	0.2	Kalgaon			OBISRA.	Kalgaon
57	2.1	0.11	0.17	0.10	0.17	0.13	10.06	11.8	—	—	55.10	—	1.0	0.1	Maldah					OBISRA.	Maldah
51	1.7	Nil	0.24	0.08	0.24	0.10	10.11	11.11	—	—	56.27	—	1.1	0.2	Dumra	OBISRA.	Dumra		
67	1.1	0.09	0.13	0.08	0.13	0.10	10.0	11.03	—	—	73.1	—	1.0	0.4	Rangpur			OBISRA.	Rangpur
75	3.3	Nil	0.10	0.03	0.10	0.04	10.06	11.8	—	—	110.15	—	1.0	0.3	Jalpaiguri					OBISRA.	Jalpaiguri
83	8.0	0.81	0.10	0.12	0.60	0.1	10.11	11.80	—	—	121.39	—	1.0	0.1	Darjeeling	OBISRA.	Darjeeling Hill Tracts		
60	1.7	0.13	—	0.11	—	—	—	—	—	—	58.24	—	—	0.7	Purnea			OBISRA.	Purnea
71	3.0	Nil	0.16	0.13	0.1	0.12	10.22	11.35	—	—	41.58	—	1.0	0.5	Muzaffarpore					OBISRA.	Muzaffarpore
65	3.6	Nil	0.13	0.13	0.1	0.13	10.19	11.07	—	—	44.58	—	1.0	0.4	Dumra	OBISRA.	Dumra		
76	2.6	0.01	0.12	0.12	0.1	0.14	10.14	11.25	—	—	40.73	—	1.0	0.2	Chupra			OBISRA.	Chupra
53	2.0	Nil	—	—	—	—	—	—	—	—	40.30	—	1.0	—	Delhi					OBISRA.	Delhi
58	4.0	drops	0.01	0.24	0.01	0.28	10.28	11.63	—	—	40.61	—	1.0	0.7	Buxar	OBISRA.	Shahabad		
60	2.7	0.01	—	—	—	—	—	—	—	—	41.09	—	1.0	—	Arrah			OBISRA.	Arrah
53	3.1	drops	0.01	0.21	0.01	0.24	10.27	11.30	—	—	41.09	—	1.0	0.7	Gya					OBISRA.	Gya
60	3.7	Nil	0.18	0.18	0.1	0.21	10.23	11.81	—	—	41.77	—	1.0	0.6	Bankipore	OBISRA.	Bankipore		
67	1.0	Nil	0.04	0.16	0.04	0.24	10.20	11.60	—	—	41.45	—	1.0	0.5	Bhagalpore			OBISRA.	South Bhagalpore
50	1.4	0.08	0.20	0.18	0.26	0.26	10	11.10	—	—	50.81	—	1.1	0.1	Dumra					OBISRA.	Dumra
54	3.0	0.14	—	0.18	—	—	—	—	—	—	50.86	—	—	0.2	Hazratnagar	OBISRA.	Hazratnagar		
63	3.9	0.71	0.73	0.40	0.73	0.51	10.12	11.26	—	—	47.95	—	1.8	0.8	Ranch			OBISRA.	Ranch
55	2.1	1.75	1.70	0.58	1.70	0.50	11.20	12.88	—	—	51.98	—	1.0	0.6	Chyabassa					OBISRA.	Chyabassa

The variations are negative when the mean for the week is less than the corresponding normal mean, and positive when greater.
 The amount of rain represents the part of the sky covered, the whole sky being denoted by 10. Under the head District observations of rainfall the normal mean of the district are the numerical averages of the rainfall returns received in the district, i.e., from the total rainfall at the sub-divisional stations.

Statement of Rainfall in Bengal for the week ending Friday (6 p.m.), the 10th of February 1888.

Meteorological division.	District.	Station.	Rainfall.							TOTAL.		Total rainfall since 1st of month.	Average total rainfall in 1st of month.	Total rainfall since 16th May 1887.	Average rainfall from 1st of May to date.
			Saturday 4th Jan.	Sunday 5th Jan.	Monday 6th Jan.	Tuesday 7th Jan.	Wednesday 8th Jan.	Thursday 9th Jan.	Friday 10th Jan.	Number of rainy days.	Rainfall in inches.				
ORTISSA.	Cuttack.	Purora						0.33	1	0.33	0.33	0.38	0.38	34.41	7.4
		Khudrah										0.5	0.5	30.51	57.7
		Banpur						0.61	1	0.61	0.61	0.61	0.61	63.21	71.5
		False Point													64.5
		G. J. Pipili													
	Balasore.	Turkey						0.40	1	0.40	0.40	0.40	0.40	43.05	49.00
		Bark						0.81	1	0.81	0.81	0.81	0.81	56.4	61.1
		K. J. Pipili						1.12	1	1.12	1.12	1.12	1.12	50.25	56.85
		Pharappa													
		Nalpa													
SOUTH-WEST BENGAL.	Midnapore.	Chandpur						1.40	1	1.40	1.40	1.40	1.40	43.21	48.4
		Id. d. track						0.7	1	0.7	0.7	0.7	0.7	41.0	45.8
		S. d. h.						1.00	1	1.00	1.00	1.00	1.00	41.0	45.8
		Bansura						1.12	1	1.12	1.12	1.12	1.12	41.0	45.8
		J. d. h.						1.00	1	1.00	1.00	1.00	1.00	41.0	45.8
	Bardhaman.	Contai						1.98	1	1.98	1.98	1.98	1.98	41.0	45.8
		Singur Island						0.41	1	0.41	0.41	0.41	0.41	41.0	45.8
		Samir						1.0	1	1.0	1.0	1.0	1.0	41.0	45.8
		Madhupur						1.04	1	1.04	1.04	1.04	1.04	41.0	45.8
		Ch. d. h.						1.4	1	1.4	1.4	1.4	1.4	41.0	45.8
SOUTH-EAST BENGAL.	Burdwan.	K. d. h.						1.4	1	1.4	1.4	1.4	1.4	41.0	45.8
		Heria						1.56	1	1.56	1.56	1.56	1.56	41.0	45.8
		Bhagpur						1.17	1	1.17	1.17	1.17	1.17	41.0	45.8
		Garia													
		Ch. d. h.						1.3	1	1.3	1.3	1.3	1.3	41.0	45.8
	Hooghly.	Ch. d. h.						1.11	1	1.11	1.11	1.11	1.11	41.0	45.8
		Ch. d. h.						1.11	1	1.11	1.11	1.11	1.11	41.0	45.8
		Ch. d. h.						1.11	1	1.11	1.11	1.11	1.11	41.0	45.8
		Ch. d. h.						1.11	1	1.11	1.11	1.11	1.11	41.0	45.8
		Ch. d. h.						1.11	1	1.11	1.11	1.11	1.11	41.0	45.8
SOUTH-EAST BENGAL.	Burdwan.	Ch. d. h.						1.11	1	1.11	1.11	1.11	1.11	41.0	45.8
		Ch. d. h.						1.11	1	1.11	1.11	1.11	1.11	41.0	45.8
		Ch. d. h.						1.11	1	1.11	1.11	1.11	1.11	41.0	45.8
		Ch. d. h.						1.11	1	1.11	1.11	1.11	1.11	41.0	45.8
		Ch. d. h.						1.11	1	1.11	1.11	1.11	1.11	41.0	45.8
	Hooghly.	Ch. d. h.						1.11	1	1.11	1.11	1.11	1.11	41.0	45.8
		Ch. d. h.						1.11	1	1.11	1.11	1.11	1.11	41.0	45.8
		Ch. d. h.						1.11	1	1.11	1.11	1.11	1.11	41.0	45.8
		Ch. d. h.						1.11	1	1.11	1.11	1.11	1.11	41.0	45.8
		Ch. d. h.						1.11	1	1.11	1.11	1.11	1.11	41.0	45.8
SOUTH-EAST BENGAL.	Burdwan.	Ch. d. h.						1.11	1	1.11	1.11	1.11	1.11	41.0	45.8
		Ch. d. h.						1.11	1	1.11	1.11	1.11	1.11	41.0	45.8
		Ch. d. h.						1.11	1	1.11	1.11	1.11	1.11	41.0	45.8
		Ch. d. h.						1.11	1	1.11	1.11	1.11	1.11	41.0	45.8
		Ch. d. h.						1.11	1	1.11	1.11	1.11	1.11	41.0	45.8
	Hooghly.	Ch. d. h.						1.11	1	1.11	1.11	1.11	1.11	41.0	45.8
		Ch. d. h.						1.11	1	1.11	1.11	1.11	1.11	41.0	45.8
		Ch. d. h.						1.11	1	1.11	1.11	1.11	1.11	41.0	45.8
		Ch. d. h.						1.11	1	1.11	1.11	1.11	1.11	41.0	45.8
		Ch. d. h.						1.11	1	1.11	1.11	1.11	1.11	41.0	45.8
SOUTH-EAST BENGAL.	Burdwan.	Ch. d. h.						1.11	1	1.11	1.11	1.11	1.11	41.0	45.8
		Ch. d. h.						1.11	1	1.11	1.11	1.11	1.11	41.0	45.8
		Ch. d. h.						1.11	1	1.11	1.11	1.11	1.11	41.0	45.8
		Ch. d. h.						1.11	1	1.11	1.11	1.11	1.11	41.0	45.8
		Ch. d. h.						1.11	1	1.11	1.11	1.11	1.11	41.0	45.8
	Hooghly.	Ch. d. h.						1.11	1	1.11	1.11	1.11	1.11	41.0	45.8
		Ch. d. h.						1.11	1	1.11	1.11	1.11	1.11	41.0	45.8
		Ch. d. h.						1.11	1	1.11	1.11	1.11	1.11	41.0	45.8
		Ch. d. h.						1.11	1	1.11	1.11	1.11	1.11	41.0	45.8
		Ch. d. h.						1.11	1	1.11	1.11	1.11	1.11	41.0	45.8
SOUTH-EAST BENGAL.	Burdwan.	Ch. d. h.						1.11	1	1.11	1.11	1.11	1.11	41.0	45.8
		Ch. d. h.						1.11	1	1.11	1.11	1.11	1.11	41.0	45.8
		Ch. d. h.						1.11	1	1.11	1.11	1.11	1.11	41.0	45.8
		Ch. d. h.						1.11	1	1.11	1.11	1.11	1.11	41.0	45.8
		Ch. d. h.						1.11	1	1.11	1.11	1.11	1.11	41.0	45.8
	Hooghly.	Ch. d. h.						1.11	1	1.11	1.11	1.11	1.11	41.0	45.8
		Ch. d. h.						1.11	1	1.11	1.11	1.11	1.11	41.0	45.8
		Ch. d. h.						1.11	1	1.11	1.11	1.11	1.11	41.0	45.8
		Ch. d. h.						1.11	1	1.11	1.11	1.11	1.11	41.0	45.8
		Ch. d. h.						1.11	1	1.11	1.11	1.11	1.11	41.0	45.8
SOUTH-EAST BENGAL.	Burdwan.	Ch. d. h.						1.11	1	1.11	1.11	1.11	1.11	41.0	45.8
		Ch. d. h.						1.11	1	1.11	1.11	1.11	1.11	41.0	45.8
		Ch. d. h.						1.11	1	1.11	1.11	1.11	1.11	41.0	45.8
		Ch. d. h.						1.11	1	1.11	1.11	1.11	1.11	41.0	45.8
		Ch. d. h.						1.11	1	1.11	1.11	1.11	1.11	41.0	45.8
	Hooghly.	Ch. d. h.						1.11	1	1.11	1.11	1.11	1.11	41.0	45.8
		Ch. d. h.						1.11	1	1.11	1.11	1.11	1.11	41.0	45.8
		Ch. d. h.						1.11	1	1.11	1.11	1.11	1.11	41.0	45.8
		Ch. d. h.						1.11	1	1.11	1.11	1.11	1.11	41.0	45.8
		Ch. d. h.						1.11	1	1.11	1.11	1.11	1.11	41.0	45.8
SOUTH-EAST BENGAL.	Burdwan.	Ch. d. h.						1.11	1	1.11	1.11	1.11	1.11	41.0	45.8
		Ch. d. h.						1.11	1	1.11	1.11	1.11	1.11	41.0	45.8
		Ch. d. h.						1.11	1	1.11	1.11	1.11	1.11	41.0	45.8
		Ch. d. h.						1.11	1	1.11	1.11	1.11	1.11	41.0	45.8
		Ch. d. h.						1.11	1	1.11	1.11	1.11	1.11	41.0	45.8
	Hooghly.	Ch. d. h.						1.11	1	1.11	1.11	1.11	1.11	41.0	45.8
		Ch. d. h.						1.11	1	1.11	1.11	1.11	1.11	41.0	45.8
		Ch. d. h.						1.11	1	1.11	1.11	1.11	1.11	41.0	45.8
		Ch. d. h.						1.11	1	1.11	1.11	1.11	1.11	41.0	45.8
		Ch. d. h.						1.11	1	1.11	1.11	1.11	1.11	41.0	45.8
SOUTH-EAST BENGAL.	Burdwan.	Ch. d. h.						1.11	1	1.11	1.11	1.11	1.11	41.0	45.8
		Ch. d. h.						1.11	1	1.11	1.11	1.11	1.11	41.0	45.8
		Ch. d. h.						1.11	1	1.11	1.11	1.11	1.11	41.0	45.8
		Ch. d. h.						1.11	1	1.11	1.11	1.11	1.11	41.0	45.8
		Ch. d. h.						1.11	1	1.11	1.11	1.11	1.11	41.0	45.8
	Hooghly.	Ch. d. h.						1.11	1	1.11	1.11	1.11	1.11	41.0	45.8
		Ch. d. h.						1.11	1	1.11	1.11	1.11	1.11	41.0	45.8</

Meteorological Division.	District.	Station.	RAINFALL.							TOTAL.		Total rain-fall since 1st of month.	Average total rain-fall from 1st of month.	Total rain-fall since 1st May 1897.	Average rainfall from 1st May 1897 to date.
			Saturday, 4th February.	Sunday, 5th February.	Monday, 6th February.	Tuesday, 7th February.	Wednesday, 8th February.	Thursday, 9th February.	Friday, 10th February.	Number of rainy days.	Rainfall of week.				
EAST BENGAL -continued.	Noakhally	Gournaddi	0.32						1	0.32	0.32	?	41.35	?	
		Baughai	0.31						1	0.31	0.31	?	62.00	?	
		Noakhally	0.19						1	0.19	0.19	0.38	74.01	110.00	
		Harishpore	0.20						1	0.20	0.20	0.30	74.03	100.00	
	Furteedpore	Ramganj										?	?	?	
		Madaripore	0.28						1	0.28	0.28	0.31	56.17	57.15	
		Furteedpore	0.75						1	0.75	0.75	0.38	38.70	57.64	
	Dacca	Goalundo	0.70						1	0.70	0.70	0.58	36.60	57.75	
		Munshikunge	0.42						1	0.42	0.42	0.53	40.24	74.08	
		Dacca	0.61						1	0.61	0.61	0.11	40.71	80.40	
		Narainkunge	0.41						1	0.41	0.41	0.19	42.83	63.61	
	Hill Tippera	Manickkunge										0.37	?	?	
		Joydehpore	0.46						1	0.46	0.46	?	51.53	?	
		Agartola	0.68						1	0.68	0.68	0.38	44.39	63.10	
		Comilla	0.37						1	0.37	0.37	0.31	49.32	78.11	
	Mymensingh	Chandpore	0.60						1	0.60	0.60	0.21	40.27	68.19	
		Brahmunberia	0.46						1	0.46	0.46	?	38.52	68.08	
		Ramchandrapore.	0.43						1	0.43	0.43	?	36.91	?	
		Nasirnagar										?	?	?	
		Daudkandi	1.45						1	1.45	1.45	?	44.16	?	
		Kasba	0.22						1	0.22	0.22	?	31.28	?	
		Laksham												?	
		Kishoregunge	0.58						1	0.58	0.58	0.31	58.65	70.71	
		Atin (Tangati)	0.51						1	0.51	0.51	0.45	40.45	66.30	
Mymensingh		0.45						1	0.45	0.45	0.30	40.30	74.27		
NORTH BENGAL	Jamulpore	0.35						1	0.35	0.35	0.41	62.86	68.73		
	Netrokona	0.32						1	0.32	0.32	0.14	74.17	78.01		
	Subornakhally	0.44						1	0.44	0.44	?	58.35	?		
	Durgapore	0.37						1	0.37	0.37	?	115.74	?		
	Dewanganj										?	79.06	?		
	Pubna	0.34						2	0.81	0.81	0.36	38.70	55.26		
	Seraikunge	0.51						2	0.57	0.57	0.29	51.09	53.28		
	Sherpore	0.41						1	0.41	0.41	0.15	48.28	50.25		
	Nowkhilla	0.35						2	0.38	0.38	0.08	50.63	54.38		
	Bokra	0.50						1	0.50	0.50	0.45	67.41	60.74		
Bajshahys	Panchibibi	0.24						1	0.24	0.24					

Statement of Rainfall in Bengal for the week ending Friday (6 p m.), the 10th of February 1888.—*concluded*

Meteorological Division.	District.	Station.	RAINFALL.							TOTAL		Total rain fall since 1st of month.	Average total rain fall from 1st of month.	Total rain fall since 15th Mar 1887.	Average rain fall from 15th Mar to date.
			Saturday Feb. 5th.	Sunday Feb. 6th.	Monday Feb. 7th.	Tuesday Feb. 8th.	Wednesday Feb. 9th.	Thursday Feb. 10th.	Number of rainy days.	Number of rainy days.					
NORTH BENGAL— —concluded.	Sahababad	Gopalnagar							Nil	Nil	Nil	0.0	42.58	41	
		Swar							Nil	Nil	Nil	0.0	39.74	41	
		Chaurah							Nil	Nil	Nil	0.0	38.13	41	
		Buxar							Nil	Nil	0.02	0.1	34.75	34	
		Dentice							Nil	Nil	Nil	0.0	30.04	30	
		Rhuboomb							Nil	Nil	Nil	0.0	41.88	41	
		Sunderam							Nil	Nil	Nil	0.0	38.14	38	
		Arran							Nil	Nil	Nil	0.0	41.51	41	
		Mohana							Nil	Nil	Nil	0.0	38.14	38	
		Gya							Nil	Nil	Nil	0.0	29.96	29	
SOUTH BENGAL.	Sahababad	Aurungabad							Nil	Nil	Nil	0.0	41.71	41	
		Chaurah							Nil	Nil	Nil	0.0	38.13	38	
		Buxar							Nil	Nil	0.02	0.1	34.75	34	
		Dentice							Nil	Nil	Nil	0.0	30.04	30	
		Rhuboomb							Nil	Nil	Nil	0.0	41.88	41	
		Sunderam							Nil	Nil	Nil	0.0	38.14	38	
		Arran							Nil	Nil	Nil	0.0	41.51	41	
		Mohana							Nil	Nil	Nil	0.0	38.14	38	
		Gya							Nil	Nil	Nil	0.0	29.96	29	
		Aurungabad							Nil	Nil	Nil	0.0	41.71	41	
CHITTA NAG.	Sahababad	Chaurah							Nil	Nil	Nil	0.0	38.13	38	
		Buxar							Nil	Nil	0.02	0.1	34.75	34	
		Dentice							Nil	Nil	Nil	0.0	30.04	30	
		Rhuboomb							Nil	Nil	Nil	0.0	41.88	41	
		Sunderam							Nil	Nil	Nil	0.0	38.14	38	
		Arran							Nil	Nil	Nil	0.0	41.51	41	
		Mohana							Nil	Nil	Nil	0.0	38.14	38	
		Gya							Nil	Nil	Nil	0.0	29.96	29	
		Aurungabad							Nil	Nil	Nil	0.0	41.71	41	
		Chaurah							Nil	Nil	Nil	0.0	38.13	38	

Explanation. In the column headed "Total rain fall since 1st of month" the total rain fall is given in inches and tenths of an inch. If any of the rain fall is wanting the corresponding space in the total rain fall column is left blank.

CALCUTTA the 11th February 1888.

SUMMARY OF THE RAINFALL AND METEOROLOGICAL OBSERVATIONS TAKEN IN BENGAL FOR THE WEEK ENDING FRIDAY, THE 10TH OF FEBRUARY 1888

THE weather in Bengal during the previous week had been characterised by exceptionally low temperatures, and by the presence of the cold-weather conditions generally in a strongly pronounced form. At the close of that week, however, temperature had commenced to increase very rapidly, and this was accompanied by a rapid fall of pressure, and on the 4th the fall at some stations equalled about a tenth of an inch. The falling pressure and increasing temperature continued on the 5th, but conditions were reversed on the 6th, and a rapid rise of pressure was recorded which was succeeded on the 7th by a fall in the mean temperature of from 3° to 5°. This was, however, only a temporary reversal, and on the 7th, 8th, and 9th pressure steadily fell, the fall on the 9th being rapid, and on this day a distinct area of low pressure was developed over Orissa and the neighbouring parts of West Bengal. This diffused depression afterwards drifted in an easterly direction, and on the 10th pressure was low over South East Bengal.

The first sign of the commencement of the disturbed conditions was that on the 8th the sky clouded over rapidly in the western districts of the province, and on the 9th the formation of the depression was accompanied by general rain over South-West Bengal and Chutia Nagpur, while showers also fell in Orissa and South Behar. On the 10th, with the movement of the depression in an easterly direction, rain became general over the whole of the province, except Benar and parts of Chutia Nagpur. On both days falls of an inch and upwards were rather numerous. With the rainfall which occurred at the end of the week a rapid diminution of temperature took place, and from the 9th to the 10th at several stations maximum temperature fell more than 10°, while at Ranezunge the fall was no less than 15°. The changes then of meteorological conditions during the week have been large and sudden, pointing clearly to the existence of slightly disturbed conditions throughout the week.

Pressure.—The pressure variations during the week have already been alluded to, and it will be seen that on the whole there has been a decided fall. Thus during the previous week the mean pressure of the province had been 0.072 inch in excess of the normal. During the present week the mean excess has been reduced to 0.025 inch, but the mean pressure has been almost normal at such stations as Calcutta and Burdwan, showing clearly the effect of the low pressure area before referred to.

Temperature.—The variations of temperature have also been large, but on the whole temperature has risen decidedly during the week and when the average maximum or day temperatures for the week in the different districts are compared with the averages of the previous week, it is found that there has been an increase of nearly 6° or an average increase of nearly a degree per day, in North Bengal the increase is as great as 8°, while in North Behar it is only 1°. The mean minimum or night temperatures have also increased during the week by about 5°, the extreme variations being from an increase of 7° in North Bengal to one of about 3° in South Behar and Chutia Nagpur. In the previous week temperature was largely below the normal, but the rapid increase during the present week has brought the mean temperature of the province above the normal by 1°. In North Bengal temperature is more than 3° above the normal.

The actual variations of temperature from the normal are best shown by the figures in the table below, where the average maximum, minimum and mean temperatures for the week at nine typical stations in different districts of the province are shown, and compared with the normal values for the same period. It will be seen that while the mean maximum temperature at the nine stations has been 1.4° below the normal value, the average minimum or night temperature at the same stations has been 2° in excess of the normal.

Table showing the excess or defect of the actual mean temperature from the normal for the week ending the 10th February 1888

	Normal mean maxi- mum tem- perature for the week ending 10th February 1887	Actual mean maxi- mum tem- perature for the week ending 10th February 1888	Excess or defect from the normal	Normal mean mini- mum tem- perature for the week ending 10th February 1887	Actual mean mini- mum tem- perature for the week ending 10th February 1888	Excess or defect from the normal	Normal mean tempera- ture for the week ending 10th February 1887	Actual mean tempera- ture for the week ending 10th February 1888	Excess or defect from the normal
Cuttack	87.8	87.2	-0.6	62.4	67.6	+5.2	75.1	77.4	+2.3
Calcutta	81.4	79.1	-2.3	58.0	59.0	+1.0	69.7	68.5	-1.2
Dacca	80.3	82.2	+1.9	59.2	61.1	+1.9	69.5	71.4	+1.9
Burdwan	80.3	80.1	-0.2	55.8	58.3	+2.5	68.1	69.6	+1.5
Patna	75.5	75.6	+0.1	50.3	51.7	+1.4	61.1	62.5	+1.4
Gaya	77.8	78.0	+0.2	53.5	55.0	+1.5	64.7	66.2	+1.5
Purneah	76.8	74.1	-2.7	48.8	51.7	+2.9	61.8	64.7	+2.9
Hazaribagh	77.1	72.6	-4.5	52.1	50.7	-1.4	64.0	62.6	-1.4
Dujeeing	45.4	44.5	-0.9	31.8	31.0	-0.8	37.1	36.3	-0.8

Rainfall.—Has been heaviest in Orissa and South-West Bengal, the stations in these two meteorological divisions having received on average fall of from one to one-and-a-quarter inch, in Chutia Nagpur the fall has averaged about three quarters of an inch, and in East Bengal about half an inch. The fall has been decidedly smaller in North Bengal, where it only averages three-tenths of an inch, while in Behar the fall has been so small that it has not averaged even a tenth of an inch.

The following table gives the summary of the temperature and rainfall data of each of the seven meteorological divisions of the province for the week ending Friday, the 10th of February 1888:—

METEOROLOGICAL DIVISIONS.	TEMPERATURE										RAINFALL							
	Highest observed during week.	Lowest observed during week.	Averages for week.				Average mean of week above or below normal mean of week.	Of week.			Rainy days.			Since 1st of month		Since 15th May 1887.		
			Of highest of each day	Of lowest of each day.	Of mean for each day.	Average.		Normal average.	Variation	Average number in week.	Normal average number in week	Variation	Average	Normal average.	Average.	Normal average.		
Orissa	81.0	56.5	82.7	66.4	74.6	+2.3	1.20	0.19	+1.01	1.4	0.4	+1.0	1.20	0.31	45.92	54.56		
South-West Bengal	84.3	49.9	79.8	58.2	69.0	+1.2	1.04	0.94	+0.70	1.6	0.6	+1.0	1.0	0.45	48.02	52.70		
East Bengal	53.1	48.1	78.3	55.9	67.1	+1.1	0.40	0.23	+0.17	1.0	0.1	+0.4	0.40	0.37	57.18	76.97		
North Bengal	83.6	46.8	76.8	51.0	64.4	+3.1	0.30	0.11	+0.19	1.2	0.5	+0.7	0.30	0.16	44.13	70.23		
North Behar	79.2	44.9	72.9	51.2	62.1	+0.9	0.02	0.14	-0.11	0.2	0.5	-0.4	0.02	0.19	52.57	48.70		
South Behar	55.6	45.8	75.1	53.6	64.4	+1.4	0.08	0.19	-0.11	0.5	0.6	-0.1	0.08	0.26	42.77	44.31		
Central Nampur	81.2*	4.8*	73.4*	51.2*	63.4*	+0.1*	0.74	0.29	+0.43	1.6	0.1	+1.0	0.72	0.36	46.52	49.80		

* Chyabassa not included.

METEOROLOGICAL OFFICE, BENGAL;

A. PIDLER,

The 14th February 1888

Offg. Meteorological Reporter to the Govt. of Bengal.

Results of the Thermometrical Observations taken at the Meteorological Office, Chowringhee, from 5th to 11th February 1888.

MONTH	Date	TEMPERATURE				Mean wet bulb	HYGROMETRY			Rain.
		Mean.	Maximum.	Range.	Minimum.		Vapour tension.	Dew point.	Humidity.	
1888		°	°	°	°	°	Inches	°	%	Inches.
February	5th	77.2	81.7	21.4	63.3	66.9	577	63.0	71	...
"	6th	70.7	80.4	18.4	62.0	62.3	451	56.1	59	...
"	7th	68.9	80.3	21.6	58.7	60.0	400	52.8	56	...
"	8th	68.6	81.7	25.3	56.4	61.8	462	56.7	66	...
"	9th	62.9	75.9	17.6	58.3	58.6	436	55.1	76	0.04
"	10th	64.1	74.1	17.1	57.3	60.4	478	57.7	79	1.65
"	11th	66.1	78.3	21.4	53.9	60.8	463	56.8	72	...

The mean temperature of the seven days

The extreme variation of temperature

The maximum temperature

The mean relative humidity

The total fall of rain from 5th to 11th February 1888

The mean temperature and humidity are obtained by applying to the mean of the 10h, 16h, and minimum readings a correction dependent on the range, and derived from the hourly observations at the Surveyor-General's Office, Chowringhee, in past years.

METEOROLOGICAL OFFICE, INDIA;

A. PEDLER,

The 13th February 1888.

For Offg. Meteorological Reporter to the Govt. of India.

MEMORANDUM.

DURING the week ending 21st January 1888, births and deaths were registered in the principal Municipalities in Bengal at the rates respectively, of 20.2 and 25.3 per 1,000 of population against 22.8 and 24.5 per 1,000, respectively during the preceding week ending 14th January, showing a diminution in the registration of births.

2. The following Municipalities returned the highest proportions of births and deaths:—

Births.			Deaths.		
		Ratio per mille.			Ratio per mille.
Monghyr	..	48.8	Serampur	...	62.8
Durbhanga	..	37.0	Suburbs of Calcutta	...	49.9
Ranaghat	..	30.0	Ulitchpara	...	7.8
			Durblunga	..	30.2
			Howrah	..	6.1
			Beaulah	...	34.2
			Puri	...	31.5

3. The mortality from the principal diseases does not exhibit any noticeable difference in comparison with the death-rates from the same diseases during the preceding week:—

				Ratio per mille during the week ending—	
				21st Jan 1888	14th Jan 1888
Cholera	...	..	..	3.0	2.3
Small-pox	..	..	..	0.3	0.3
Fever	..	..	..	10.9	10.1
Bowel-complaints	..	..	..	1.1	2.2
Injury	...	..	..	3	2
Other causes	...	..	..	6.9	7.3

4. The highest death-rates from cholera, fever, bowel-complaints and the diseases classed under the head of "Other causes" were returned from the following Municipalities; the rest of the maladies not proving noticeably fatal anywhere:—

Cholera	Ratio per mille.	Fever.	Ratio per mille.	Bowel complaints.	Ratio per mille.	Other causes.	Ratio per mille.
Serampur	21.6	Beaulah	31.2	Serampur	13.7	Narainganj	16.5
Durblunga	11.0	Puruch	20.8	Puri	12.6	Serampur	15.7
Suburbs of Calcutta	7.2					Ceylon	13.7
Howrah	5.7					Suburbs of Calcutta	13.4

5. The mortality referable to Sex, Class and Age stood as follows:—

According to Sex.		According to Class.		According to Age.	
	Ratio per mille.		Ratio per mille.		Ratio per mille.
Males	26.3	Christians	26.1	Under 1 year	156.1
Females	21.2	Hindus	25.1	1 and under 5 years	32.7
Ratio of male deaths to every 100 female deaths	123	Mahomedans	25.9	5 " 10 "	11
				10 " 15 "	7.1
				15 " 20 "	11.7
				20 " 25 "	16.6
				25 " 30 "	19.7
				30 " 40 "	19.81
				40 " 50 "	28.9
				50 " 60 "	80.1
				60 years and upwards	80.1

R. LIDDERDALE, M.D., Deputy Surgeon-General,

The 13th February 1888

Sanitary Commissioner for Bengal.

Statement showing the Results of the Registration of Births and Deaths in the principal Municipalities in Bengal during the week ending 21st January 1888.

DISTRICTS.		NAMES OF MUNICIPALITIES.		POPULATION.					BIRTHS.					MORTALITY ACCORDING TO—										Sex.	
				NUMBER OF					RATIO PER 1,000 OF POPULATION PER ANNUM.					RATIO PER 1,000 OF POPULATION PER ANNUM.										RATIO PER 1,000 OF POPULATION PER ANNUM.	
				Total.					Total.					DEATHS FROM—										All causes.	
				Males.					Males.					All causes.										All causes.	
				Females.					Females.					All causes.										All causes.	
				Total.					Total.					All causes.										All causes.	
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DISTRICTS.		NAMES OF MUNICIPALITIES.		MORTALITY ACCORDING TO—										Age																	
		DEATHS AMONG—		RATIO PER 1000 OF POPULATION PER ANNUM		DRAINS										RATIO PER 1000 OF POPULATION PER ANNUM															
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OFFICE OF SANITARY COMMISSIONER FOR BENGAL,
 The 13th February 1888
 R. LIDDERDALE, M.D., Deputy Surgeon-General,
 Sanitary Commissioner for Bengal

CIRCULAR AND EASTERN CANALS

Approximate return of traffic for the week ending Saturday, the 11th February 1888, as compared with the corresponding week of the previous year

NATURE OF CARGO	WEEK ENDING SATURDAY THE 11th FEBRUARY 1888			WEEK ENDING SATURDAY THE 11th FEBRUARY 1887		
	Number of Boats	Weight of cargo	Tollage	Number of Boats	Weight of cargo	Tollage
	No	Mds	Rs	No	Md	Rs
Rice and paddy	1 927	1 35 723	7 765	1 878	3 59 275	6 344
Jute	137	1 01 981	1,712	117	76 994	1 156
Firewood	100	68 337	1 000	159	94 130	1 259
Other articles	995	2,73 230	4 64	1 110	2 62 622	1,155
Total	3 168	8 79 271	14 824	3 251	7,92,981	13 194

EAST INDIAN RAILWAY.

Statement of Goods Traffic in Staples carried during the 5 weeks ended 31st December 1887, as compared with the same period of 1886.

STAPLES.	1887.		1886.		Increase.		Decrease.	
	Weight.	Freight.	Weight.	Freight.	Weight.	Freight.	Weight.	Freight.
	Mds.	Rs.	Mds.	Rs.	Mds.	Rs.	Mds.	Rs.
ANIMALS, LIVING.	No.		No.		No.		No.	
FOR SALE.								
Horses, ponies, and mules ...	256	5,416	157	3,140	99	2,276		
Cattle ...	19	297	17	314	2			
Sheep and goats ...	7,573	6,001	3,505	2,914	4,068	3,087		46
Other kinds ...			150	5			150	5
BORAX	2,623	1,974	1,361	804	1,262	1,170		
CANES AND RATTANS								
Caoutchouc (Indian-rubber)	2	1			2	4		
Chinese and Japanese ware	358	124	307	53	51	111		
Coal and coke, up ...	6,88,458	2,09,527	6,10,388	2,39,147	78,070			
Ditto, down ...	28,87,789	4,04,858	18,81,779	2,06,908	10,06,010	1,33,950		29,220
COTTON, RAW	2,86,196	2,03,341	4,14,394	3,55,072			1,28,198	1,31,081
Twist and yarn (European)	9,155	13,249	9,347	13,393			192	153
Ditto (Indian)	15,296	10,012	17,433	10,747			2,137	795
Piece-goods (European)	1,28,139	1,39,976	1,35,343	1,52,757			7,214	12,781
Ditto (Indian)	23,306	18,378	21,628	18,658			1,677	300
DRUGS AND MEDICINES.								
Assorted ...	747	490	412	276	335	214		
Other sorts, not interfering	1,362	2,477	1,545	2,474	357	25		
Intoxicating drugs (other than opium, i.e., arsenic, blague, ganja, and charus, &c.)	894	679	814	482	89	197		
DYEING MATERIALS.								
Indigo	81,659	1,00,856	91,847	1,09,639			8,188	8,783
Madder or manjit	28	9	17	7	11	2		
Safflower	126	74	142	46		28		
Turmeric	11,544	8,949	15,362	16,450			115	
Other kinds	15,595	10,590	2,774	5,544	6,821	5,046		7,540
EARTHENWARE AND PORCELAIN	909	1,540	921	5,544	6,021	5,046		
Jute, raw	59,215	11,969	19,445	5,582	39,800	6,387	42	95
FIBROUS PRODUCTS.	97,785	50,081	86,722	41,158	11,063	8,923		
Do., manufactured (gunny bags and cloths)								
Other fibres, raw	11,471	8,244	16,714	16,312			2,243	8,068
Ditto, manufactured	3,532	1,925	2,538	794				
FRUITS & NUTS	13,412	8,496	5,952	5,164	9,590	5,632		
Coconuts	56,435	58,462	50,152	45,623	6,103			
Wheat	3,63,038	87,822	8,30,448	2,25,382			4,66,830	1,37,560
GRAIN & PULSES	5,06,412	1,37,127	3,36,412	90,317	1,50,000	46,810		
Gram and pulses	16,36,718	2,63,362	8,88,798	1,54,832	1,44,920	79,130		
Rice, husked	19,657	3,866	16,857	3,266	2,800	610		
Do., unhusked	8,82,656	1,74,046	3,06,156	53,176	5,76,500	1,20,840		
Other rain and spring crops	12,065	31,800	1,787	25,188	1,378	6,612		
GOVERNMENT STORES	3,797	2,410	3,800	2,476				
GUMS AND RESINS	91,917	64,412	1,09,497	67,393			3	26
HIDES & SKINS.	17,666	10,552	16,237	8,711	1,429	1,841	8,580	2,954
Hides of cattle								
Skins of sheep, goats, and small animals								
HORNS	1,582	816	2,052	1,437			470	621
LAC	664	432	427	258	237	174		
Do. shell	28,060	20,768	22,188	15,490	5,881	5,272		
Do. stick and other kinds	36,494	10,880	31,402	7,834	5,092	3,046		
LEATHER	2,121	4,419	2,197	4,654			76	205
Leather, unmanufactured	2,589	5,146	3,116	4,989			527	
Ditto, manufactured	20,767	16,483	22,999	29,959			2,142	6,476
LIQUORS	480	280	265	235	115	44		
MATS	1,42,022	19,492	93,404	18,025	48,618	1,467		
MINERALS	29,661	18,815	40,985	28,296			11,324	10,251
METALS AND MANUFACTURES.	1,25,818	74,335	1,44,240	67,351	11,588	7,581		
Iron	9,300	9,000	10,542	8,065			1,242	739
Other metals	57,421	32,962	35,842	18,756	21,579	14,206		
OPUM	86,385	87,782	87,816	89,245				
PAINTS AND COLOURS	3,977	2,019	1,622	1,763	1,445	286	1,441	1,461
PROVISIONS	29,905	28,436	31,150	28,755			1,245	269
Ghee	9,349	10,436	6,982	7,187	2,367	2,939		
Other kinds	8,178	777	34,665	1,493			25,487	416
RAILWAY MATERIALS, CONSTRUCTION ACCOUNT	3,01,254	1,15,386	1,17,015	1,03,539	1,54,229	11,847		
Ditto ditto, Foreign	6,25,733	1,22,266	6,68,817	1,57,929			38,084	14,754
SALT	82,877	35,729	65,539	29,475	17,338	9,254		
SALTPETRE, &c.	16,350	4,151	12,450	3,922	4,200	1,321		
Linseed	7,09,957	2,17,833	2,65,757	75,843	1,44,230	1,43,900		
SEEDS	1,07,810	32,279	1,41,876	35,149			34,069	870
Mustard and rape	82,785	30,787	66,975	23,747	35,810	22,440		
Til or gingelly	79,598	10,144	84,678	26,254			5,080	1,110
Other oilseeds	31,100	10,306	9,650	21,296			29,000	10,290
OTHER SEEDS	190	119	22	145			55	26
Indigo seed	52,695	15,201	31,795	13,811	17,300	1,396		
Tea seed	2,676	1,846	3,006	1,944			339	98
SILK								
Do., manufactured (European)	250	145	349	277			99	126
Do., ditto (Indian)	11,849	7,727	12,423	7,390			574	
SPICES	1,05,030	13,408	1,01,318	14,252	3,712			
STONE AND MARBLE	1,50,979	29,263	1,57,700	29,648	2,275	215		
SUGAR	3,78,061	89,743	3,41,348	65,978	66,715	14,765		
Sugar, refined	5,722	6,399	5,912	4,876	710	1,423		
Do., unrefined	1,790	60	1,766	58				
TEA	40,652	18,806	49,315	23,225			8,663	4,419
TOBACCO	34,607	8,132	29,394	7,167	5,163	965		
WOOD	36,941	8,457	57,567	4,683			20,426	1,186
Timber	2,528	2,411	2,501	2,121	27	287		
Firewood	660	1,351	676	1,373			16	22
WOOL								
Wool, raw	4,182	4,453	3,981	4,358	201			
Do., manufactured (European)								
Do., ditto (Indian)								
Shawls								
ALL OTHER ARTICLES OF MERCHANDISE	4,26,431	2,30,435	3,57,790	2,12,194	68,641	27,241		
Total	1,12,33,328	33,90,011	90,83,873	31,08,774	29,55,117	6,88,501	8,05,022	4,01,352

*General remarks on the fluctuation of principal staples carried over the East Indian Railway
during five weeks ended 31st December 1887.*

INCREASES.

Coal and coke—There was an increase in the weight of upwards coal with a decrease in the earnings, and in downwards coal there was increase in both weight carried and freight earned. The decrease in the earnings of upwards despatches is due to lesser demands from the North-Western Railway, and the increase in downward traffic to heavier despatches to Sealdah, Chitpore and other stations on the Eastern Bengal State Railway and the Jubilee Bridge, also to greater demand for coal for brick burning.

Jute, raw—Chiefly due to despatches from the Eastern Bengal State Railway via the Jubilee Bridge.

Granny—The increase was chiefly in despatches from Howrah for biscuit for immediate shipment to Europe.

Cumrants—Due to reduction in charge for carriage.

Gram and Pulses—*Old grains*—The increases shown under these staples are due to despatches from stations on the Lohit and Dinapore district to stations in the North-West, owing to the scarcity referred to in the report for November having continued during the period under review.

Rice (husked and unhusked)—As with the staples referred to in the preceding paragraph, the despatches of rice were principally upwards to meet demands in the North-West for food grains. Hence this increase.

Government stores—This increase was almost entirely in ammunition from Howrah.

Tea—The increase was principally in despatches from Mazipur owing to an active speculative demand from home.

Iron—Due to improved demand in Calcutta for despatch to up-country marts.

Oil—Chiefly in kerosene oil from Howrah.

Rubber material Foreign—This increase was principally in despatches from via Jabulpore or the Indian Midland Railway.

Sulphate—The increases were in despatches to Calcutta partly for shipment to China.

Salts—The increase was chiefly in biscuit to Howrah for export to Europe.

Sugar refined and unrefined—The principal increase was in the despatches from the Oudh and Reckhkhund Railway to this Company.

DECREASES.

Cotton—The serious falling off in this important staple can only be attributed to the partial failure of the cotton crops owing to the heavy rains.

Piece good Foreign—The decrease was principally in despatches from Howrah to stations on the North-West and the Punjab and may be attributed to the high prices ruling there for food grains.

Indigo—Succeeding a larger increase in November as compared with November 1886.

Turnip seed—Due to absence of demand.

Other jute's raw—Due to lesser demand in the Calcutta market.

Fruits other kinds—There was an increase in weight carried attended with a decrease in earnings, the former was due to increased traffic in myriadamans from stations on the Jabulpore line to Bombay, and the latter to the falling off in local traffic from Howrah.

Wheat—This decrease is in continuation of those shown in all the previous months of the half year and is due to want of stock.

Brass and copper—Due to rise in the price of copper, owing to the French speculation.

Salt—The decrease was chiefly in the despatches from Howrah.

Tobacco—Due to ordinary fluctuation of trade.

N. S. L. CALTER *Traffic Manager.*

TRAFFIC MANAGER'S OFFICE, JAMALPUR, the 9th February 1888.

Weekly Return of Traffic Receipts on Indian Railways.

EAST INDIAN RAILWAY

Approximate Return of Traffic for week ended 4th February 1888, on 151½ miles open

	COACHING TRAFFIC		MERCHANDISE AND MINERAL TRAFFIC		Other earnings (estimated)	Total earnings	TRAFFIC IN TRAIN MILES RUN.		
	Number of passengers	Coaching receipts	Weight carried	Receipts			Coaching	Merchandise	Total
		Rs. A. P.	Mt. lbs.	Rs. A. P.	Rs. A. P.	Rs. A. P.			
Total traffic for the week	279,475*	3,50,811 13 6*	28,31,118 10	6,96,672 4 4	21,912 4 0	13,60,986 6 4	100,61½	100,61½	172,021½
per mile of railway		1 12 0		45 0 4 5	11 7 5	86 0 4 1			
for previous 4 weeks of half-year	1,006,411	1,16,82,270	1,11,818,144	26,00,658 9	79,984 14 0	3,73,410 13 1	1,11,81½	1,11,81½	2,23,63½
Total for 5 weeks	1,300,226	1,51,33,041 0	1,40,136,254	33,27,307 14 9	1,01,995 2 0	5,47,396 7 5	1,22,430	1,22,430	2,44,860
COMPARISON.									
Total for corresponding week of previous year	257,790	3,10,538 6	24,47,910	6,81,279 14 1	18,718 7 6	10,10,351 14 1	101,894	101,894	173,788
per mile of railway corresponding week of previous year		204 11 8		44 11 1	12 5 8	66 14 7			
Total to corresponding date of previous year	1,25,778½	1,41,21,710 0 0	1,29,12,000 0 0	33,64,141 11 9	95,509 12 0	4,81,450 14 6	1,01,110	1,01,110	2,02,220

* The increase in Coaching traffic is due to the running of 100 extra trains and pilgrim traffic on account of the M. C. S. F. S.

Approximate Statement of gross receipts of the East Indian Railway, prepared in accordance with Public Works Department Circular No. XVI, Railway, dated 23rd July 1883

RECEIPTS FOR WEEK ENDING 4TH FEBRUARY 1887			RECEIPTS FOR WEEK ENDING 4TH FEBRUARY 1888			TOTAL RECEIPTS FROM 1ST APRIL 1886 TO 5TH FEBRUARY 1887			TOTAL RECEIPTS FROM 1ST APRIL 1887 TO 4TH FEBRUARY 1888			Total increase in 1888	Total decrease in 1888
Mean mileage worked	Receipts	Per mile worked	Mean mileage worked	Receipts	Per mile worked	Mean mileage worked	Total receipts	Per mile worked	Mean mileage worked	Total receipts	Per mile worked		
	Rs.	Rs.		Rs.	Rs.		Rs.	Rs.		Rs.	Rs.		Rs.
151½	10,10,352	667	171½	10,60,398	706	151½	3,91,60,908	587	1,51½	3,84,80,521	577		6,70,847

PATNA-GYA STATE RAILWAY.

Approximate Return of Traffic for week ended 4th February 1888, on 57½ miles open

	COACHING TRAFFIC		MERCHANDISE AND MINERAL TRAFFIC		Other earnings (estimated)	Total earnings	TRAFFIC IN TRAIN MILES RUN.		
	Number of passengers	Coaching receipts	Weight carried	Receipts			Coaching	Merchandise	Total
		Rs. A. P.	Mt. lbs.	Rs. A. P.	Rs. A. P.	Rs. A. P.			
Total traffic for the week	11,202	6,942 1 0	37,189 20	2,316 4 0	38 8 0	9,297 0 0	1,820	574	2,394
per mile of railway	21	121 5 11	650 19	40 7 11	0 10 3	162 8 7			
for previous 4 weeks of half-year	52,936	29,132 0 6	1,32,082 20	8,282 12 0	121 8 0	37,541 0 0	7,323	2,481	9,804
Total for 5 weeks	66,138	36,074 1 6	1,69,272 0	10,598 0 0	159 13 0	46,838 0 0	8,143	2,955	11,098
COMPARISON.									
Total for corresponding week of previous year	14,397½	8,271 12 9	48,659 20	3,167 10 0	37 2 0	11,479 8 9	1,827	929	2,756
per mile of railway corresponding week of previous year	252	144 10 7	850 30	55 6 1	0 10 5	200 11 1			
Total to corresponding date of previous year	1,47,88½	32,068 13 11	2,26,026 30	15,271 0 0	260 6 6	47,600 6 5	8,864	3,099	11,963

Approximate Statement of gross receipts of the Patna-Gya State Railway, prepared in accordance with Public Works Department Circular No. XXI, Railway, dated 23rd July 1883.

RECEIPTS FOR WEEK ENDING 5TH FEBRUARY 1887			RECEIPTS FOR WEEK ENDING 4TH FEBRUARY 1888			TOTAL RECEIPTS FROM 1ST APRIL 1886 TO 5TH FEBRUARY 1887			TOTAL RECEIPTS FROM 1ST APRIL 1887 TO 4TH FEBRUARY 1888			Total increase in 1888	Total decrease in 1888
Mean mileage worked	Receipts	Per mile worked	Mean mileage worked	Receipts	Per mile worked	Mean mileage worked	Total receipts	Per mile worked	Mean mileage worked	Total receipts	Per mile worked		
	Rs.	Rs.		Rs.	Rs.		Rs.	Rs.		Rs.	Rs.		Rs.
57½	11,480	201	57½	9,207	163	57½	4,50,200	179	57½	4,24,431	169		25,769

DILDARNAGAR GHAZIPUR STATE RAILWAY

Approximate Return of Traffic for week ended 4th February 1888 on 12 miles open

	COACHING TRAFFIC		MERCHANDISE AND MINERAL TRAFFIC		Other earnings (estimated)	Total earnings	TRAFFIC TRAIN-MILES RUN		
	Number of passengers	Receipts	Weight carried	Receipts			Coaching	Merchandise	Total
Total for the week	988	Rs 40 10 0 41 0 11	1 3 10	Rs 1 7 0 1 4 7	11 10 0 0 1 6	Rs 54 11 0 70 4 11	31 1/2	11 2	42 1/2
Of per mile of line									
For the week of half year	1 81	Rs 31 1 0	10 3 10	Rs 1 3 7 0	33 0 0	Rs 32 11 0	1 1/4	100	1 1/4
Total for the week	10 81	Rs 3 3 0	1 4 1 0	Rs 1 1 0	10 0	Rs 1 1 0	1 1/4	7 2	1 1/4
COMPARISON									
Total for the week of previous year	1 0	Rs 4 1 1 1	0 10	Rs 1 2 0	3 8 3	Rs 11 7 7	2 1/4	17 1/2	3
Per mile of line of the week of half year		4 1 1		2 11 1	0 3 8	Rs 11 6			
Total for the week of half year	14 0	Rs 1 0 1	0 1 2	Rs 2 1 0	2 1 0	Rs 4 7 7	1 1/4	7 1/2	1 1/4

Approximate Statement of gross receipts of the Dildarnagar Ghazipur State Railway prepared in accordance with Public Works Department Circular No. XXI, Railway, dated 23rd July 1883

RECEIPTS FOR WEEK ENDING 4TH FEBRUARY 1888		RECEIPTS FOR WEEK ENDING 4TH FEBRUARY 1887		TOTAL RECEIPTS FROM 1ST APRIL 1886 TO 31ST FEBRUARY 1887		TOTAL RECEIPTS FROM 1ST APRIL 1887 TO 31ST FEBRUARY 1888		Total increase in 1888		Total decrease in 1888	
Mean receipts per mile worked	Receipts	Mean receipts per mile worked	Receipts	Total receipts	Mean receipts per mile worked	Total receipts	Mean receipts per mile worked	Total receipts	Mean receipts per mile worked	Total receipts	Mean receipts per mile worked
Rs	Rs	Rs	Rs	Rs	Rs	Rs	Rs	Rs	Rs	Rs	Rs
1 1/4	1 1/4	1 1/4	8 1/4	1 1/4	1 1/4	12 1/4	1 1/4	12 1/4	1 1/4	12 1/4	1 1/4

SINDIA STATE RAILWAY

Approximate Return of Traffic for week ended 4th February 1888 on 74 1/2 miles open

	COACHING TRAFFIC		MERCHANDISE AND MINERAL TRAFFIC		Other earnings (estimated)	Total earnings	TRAFFIC TRAIN MILES RUN		
	No. of passengers	Receipts	Weight carried	Receipts			Coaching	Merchandise	Total
Total for the week of previous half year	4 07	Rs 10 1 1	88 0 10	Rs 1 7 0	10 0 0	Rs 7 1 11 0	1 1/4	1 54 1/2	1 1/4
Total for the week	18 337	Rs 11 05 1 0	1 01 0	Rs 1 0 0 0	1 4 1 0	Rs 31 711 0 0	2 0 1/2	6 81 1/2	2 0 1/2
COMPARISON	7 14	Rs 1 34 0 0	1 1 1	Rs 1 1 7 0	1 1 1 0	Rs 40 739 8 0	1 0 1/2	8 127	1 1/4
Total for the week of previous year	1 14	Rs 1 8 2 0	41 817 0	Rs 1 15 3 0	87 1 3	Rs 10 048 6 4	8 1/4	1 367	1 1/4
Per mile of line of the week of half year		6 1 8 1		6 10 8	1 2 8	Rs 14 5 5			
Total for the week of half year	8 0	Rs 21 17 3 11	4 88 12 10	Rs 28 89 1 1 0	45 11 3	Rs 50 87 11 2	1 0 1/2	6 557	1 1/4

Approximate Statement of gross receipts of the Sindia State Railway, prepared in accordance with Public Works Department Circular No. XXI, Railway, dated 23rd July 1883

RECEIPTS FOR WEEK ENDING 4TH FEBRUARY 1888		RECEIPTS FOR WEEK ENDING 4TH FEBRUARY 1887		TOTAL RECEIPTS FROM 1ST APRIL 1886 TO 31ST FEBRUARY 1887		TOTAL RECEIPTS FROM 1ST APRIL 1887 TO 31ST FEBRUARY 1888		Total increase in 1888		Total decrease in 1888	
Mean receipts per mile worked	Receipts	Mean receipts per mile worked	Receipts	Total receipts	Mean receipts per mile worked	Total receipts	Mean receipts per mile worked	Total receipts	Mean receipts per mile worked	Total receipts	Mean receipts per mile worked
Rs	Rs	Rs	Rs	Rs	Rs	Rs	Rs	Rs	Rs	Rs	Rs
1 1/4	10,148	1 1/4	7,026	3,35,648	102	3,75,142	114	30,404	1 1/4	30,404	1 1/4

TARKESSUR BRANCH RAILWAY.

Approximate Return of Traffic for week ended 4th February 1888, on 2½ miles open.

	COACHING TRAFFIC.		MERCHANDISE AND MINERAL TRAFFIC		Other earnings (estimated)	Total earnings	TRAFFIC TRAIN MILES RUN		
	Number of passengers	Coaching receipts	Weight carried	Receipts			Coaching	Merchandise	Total.
		Rs A 1	Mds s	Rs A 1	Rs A 1	Rs A 1			
Total traffic for the week	10 833	4 970 2 0	9 011 20	325 0 0	9 0 0	4 984 2 0	874	105	989
Or per mile of railway		222 7 8		14 9 8	0 6 6	237 7 10			
for previous 4 weeks of half-year	77 036	19 157 1 0	28 755 90	917 2 0	20 14 0	19 177 5 0	117	269	1 872
Total for 5 weeks	96 869	24 107 3 0	37 766 0	1 242 2 0	29 14 0	24 136 7 0	117	269	4 850
COMPARISON									
Total for corresponding week of previous year	16,209	4 413 9 0	7 113 30	274 7 0	9 1 0	4 422 9 0	17	41	968
Or per mile of railway corresponding week of previous year		174 12 4		12 7 1	0 6 1	187 8			
Total to corresponding date of previous year	81 045½	21 688 8 10	31 710 30	1 100 12 0	90 12 3	21 789 1 1	1431	207	5,018

Approximate Statement of gross receipts of the Tarkeessur Branch Railway, prepared in accordance with Public Works Department Circular No. 1117 Railway dated 23rd July 1883

RECEIPTS FOR WEEK ENDING 5TH FEBRUARY 1887			RECEIPTS FOR WEEK ENDING 4TH FEBRUARY 1888			TOTAL RECEIPTS FROM 1ST APRIL 1886 TO 11TH FEBRUARY 1887			TOTAL RECEIPTS FROM 1ST APRIL 1877 TO 11TH FEBRUARY 1888			Total increase in 1888	Total decrease in 1888
Steam engine worked	Receipts.	Per mile worked	Mean mileage worked	Receipts.	Per mile worked	Mean mileage worked	Total receipts	Per mile worked	Mean mileage worked	Total receipts	Per mile worked		
	Rs.	Rs.		Rs.	Rs.		Rs.	Rs.		Rs.	Rs.	Rs.	
22½	4,617	208	22½	5,281	234	22½	139,582	204	22½	2,18,166	211	19,371	

EASTERN BENGAL STATE RAILWAY

(INCLUDING N. B., Dacca, K. and D., and Assam Bihar Sections)

Approximate Return of Traffic for week ended 28th January 1888, on 615 miles open.

	COACHING TRAFFIC		MERCHANDISE AND MINERAL TRAFFIC		Other earnings (estimated) including Steam boat	Total earnings	TRAFFIC TRAIN MILES RUN		
	Number of passengers	Coaching receipts	Weight carried	Receipts			Coaching	Merchan- dis	Total
		Rs A P	Mds S	Rs A P	Rs A P	Rs A P			
Total traffic for the week	132,953	11,024 0 0	7,671 05 0	99,120 0 0	11 0 0	11,035 0 0	2,111	29,474	31,585
per mile of railway	206	180 0 0	12 42 0	154 0 0	18 0 0	208 0 0			
for previous 3 weeks of half-year	948,269	1,85,100 0 0	11,31,943 0	3,18,801 0 0	30 102 0 0	1,88,202 0 0	11,111	1,41,182	1,52,293
Total for 4 weeks	1,081,221	2,00,124 0 0	12,03,086 0	3,18,921 0 0	71 1 0 0	2,00,196 0 0	12,222	1,41,664	1,53,886
COMPARISON.									
Total for corresponding week of previous year	110,362	63,128 0 0	6,60,845 0	97,812 0 0	15 773 0 0	63,133 0 0	11,163	37,114	48,277
per mile of railway corresponding period of previous year	192	5 0 0	10 84 0	152 0 0	18 0 0	275 0 0			
Total to corresponding date of previous year	512,690	2,40,618 0 0	22,48,690 0	3,41,111 0 0	47 723 0 0	2,40,841 0 0	12,222	1,41,664	1,53,886

* Exclusive of Steam boat earnings
† Includes 10,000 Ballast transactions

FINANCIAL YEAR

Approximate Statement of gross receipts of the Eastern Bengal State Railway

RECEIPTS FOR WEEK ENDING 22ND JANUARY 1887.			RECEIPTS FOR WEEK ENDING 21ST JANUARY 1888.			TOTAL RECEIPTS FROM 1ST APRIL 1886 TO 22ND JANUARY 1887			TOTAL RECEIPTS FROM 1ST APRIL 1887 TO 21ST JANUARY 1888			Total increase in 1888	Total decrease in 1887-88
Steam engine worked.	Receipts.	Per mile worked	Mean mileage worked.	Receipts.	Per mile worked	Mean mileage worked	Total receipts	Per mile worked	Mean mileage worked	Total receipts	Per mile worked		
	Rs.	Rs.		Rs.	Rs.		Rs.	Rs.		Rs.	Rs.	Rs.	
22	1,77,593	223	645	2,06,094	319	606	60,313	216	615	80,18,681*	289	110,87,712	.....

* Audited up to 3rd December 1887

BENGAL CENTRAL RAILWAY.

Approximate Return of Traffic for week ended 28th January 1888, on 125 miles open.

	COACHING TRAFFIC.		MERCHANDISE AND MINERAL TRAFFIC.		Other earnings (estimated).	Total earnings.	TRAFFIC TRAIN-MILES RUN.		
	Number of passengers.	Coaching receipts.	Weight carried.	Receipts.			Coaching.	Merchandise.	Total.
		Rs. A. P.	Mds. S.	Rs. A. P.	Rs. A. P.	Rs. A. P.			
Total traffic for the week	24,000	10,013 0 0	40,854 0	3,858 0 0	60 0 0	13,931 0 0	3,500	1,710	5,210
Or per mile of railway	192	80 0 0	329 0	31 0 0	...	111 0 0	...	...	...
For previous 3 weeks of half-year	61,611	23,455 0 0	1,13,440 0	11,167 0 0	160 0 0	34,793 0 0	10,503	5,127	15,630
Total for 4 weeks	85,611	33,470 0 0	1,63,291 0	15,025 0 0	220 0 0	48,724 0 0	14,003	6,837	20,840
COMPARISON.									
Total for corresponding 7 days of previous year	21,538	8,156 0 0	34,281 0	1,037 0 0	67 0 0	10,160 0 0	3,610	1,400	5,010
Per mile of railway corresponding period of previous year	172	65 0 0	274 0	15 0 0	1 0 0	81 0 0	...	...	...
Total to corresponding date of previous year	91,895	32,762 0 0	1,00,927 0	6,041 0 0	184 0 0	38,987 0 0	15,357	6,253	21,610

FINANCIAL YEAR.

Approximate Statement of gross receipts of the Bengal Central Railway.

RECEIPTS FOR WEEK ENDING 22ND JANUARY 1887.			RECEIPTS FOR WEEK ENDING 21ST JANUARY 1888.			TOTAL RECEIPTS FROM 1ST APRIL 1886 TO 22ND JANUARY 1887.			TOTAL RECEIPTS FROM 1ST APRIL 1887 TO 21ST JANUARY 1888.			Total increase in 1887-88.	Total decrease in 1887-88.
Mean mileage worked.	Receipts.	Per mile worked.	Mean mileage worked.	Receipts.	Per mile worked.	Mean mileage worked.	Total receipts.	Per mile worked per week.	Mean mileage worked.	Total receipts.	Per mile worked per week.	Rs.	
	Rs.	Rs.		Rs.	Rs.		Rs.	Rs.		Rs.	Rs.	Rs.	
125	10,160	81	125	13,931	111	125	4,67,977	87	125	5,46,413*	102	78,436	.....

* Audited up to week ending 3rd December 1887.

DACCA STATE RAILWAY.

Approximate Return of Traffic for week ended 28th January 1888, on 86 miles open.

	COACHING TRAFFIC.		MERCHANDISE AND MINERAL TRAFFIC.		Other earnings (estimated).	Total earnings.	TRAFFIC TRAIN-MILES RUN.		
	Number of passengers.	Coaching receipts.	Weight carried.	Receipts.			Coaching.	Merchandise.	Total.
		Rs. A. P.	Mds. S.	Rs. A. P.	Rs. A. P.	Rs. A. P.			
Total traffic for the week	11,784	6,128 0 0	45,106 0	2,341 0 0	65 0 0	8,545 0 0	2,001	953	2,954
Or per mile of railway	172	71 0 0	525 0	27 0 0	1 0 0	99 0 0	...	...	...
For previous 3 weeks of half-year	41,418	18,054 0 0	48,265 0	5,970 0 0	150 0 0	22,204 0 0	6,164	2,728	8,892
Total for 4 weeks	50,202	24,182 0 0	93,435 0	8,311 0 0	216 0 0	30,740 0 0	8,165	3,691	11,856
COMPARISON.									
Total for corresponding week of previous year	11,812	2,918 0 0	54,834 0	2,852 0 0	188 0 0	6,988 0 0	2,051	2,079	4,730
Per mile of railway corresponding period of previous year	138	41 0 0	638 0	33 0 0	2 0 0	81 0 0	...	...	...
Total to corresponding date of previous year	50,329	18,387 0 0	91,140 0	7,694 0 0	900 0 0	26,981 0 0	8,907	5,163	14,190

FINANCIAL YEAR.

Approximate Statement of gross receipts of the Dacca State Railway.

RECEIPTS FOR WEEK ENDING 22ND JANUARY 1887.			RECEIPTS FOR WEEK ENDING 21ST JANUARY 1888.			TOTAL RECEIPTS FROM 1ST APRIL 1886 TO 22ND JANUARY 1887.			TOTAL RECEIPTS FROM 1ST APRIL 1887 TO 21ST JANUARY 1888.			Total increase in 1887-88.	Total decrease in 1887-88.
Mean mileage worked.	Receipts.	Per mile worked.	Mean mileage worked.	Receipts.	Per mile worked.	Mean mileage worked.	Total receipts.	Per mile worked per week.	Mean mileage worked.	Total receipts.	Per mile worked per week.	Rs.	
	Rs.	Rs.		Rs.	Rs.		Rs.	Rs.		Rs.	Rs.	Rs.	
86	6,988	81	86	30,740	99	86	2,22,294	60	86	2,78,555*	75	56,261	.....

* Audited up to week ending 3rd December 1887.

ASSAM-BEHAR STATE RAILWAY

(PUBNAH SECTION)

Approximate Return of Traffic for week ended 29th January 1888, on 39 miles open

	COACHING TRAFFIC.		MERCHANDISE AND MINERAL TRAFFIC		Other earnings (estimated)	Total earnings	TRAFFIC TRAIN-MILES RUN		
	Number of passengers	Coaching receipts	Weight carried	Receipts.			Coaching	Merchandise	Total
		Rs A P	Mds S	Rs A P	Rs A P	Rs A P			
Total traffic for the week	4115	1723 0 0	1015 0	1,947 0 0	10 0 0	1,957 0 0	46	540	1,092
Or per mile of railway	107	44 0 0	26 0	49 0 0	0 0 0	49 0 0	12	138	276
For previous 3 week of half year	7853	981 0 0	5108 0	4,172 0 0	41 0 0	4,213 0 0	111	1,429	3,276
Total for 4 weeks	11988	4,574 0 0	11108 0	12,119 0 0	141 0 0	12,260 0 0	274	3,598	7,862
COMPARISON									
Total for corresponding week of previous year									
Per mile of railway corresponding week of previous year									
Total to corresponding date of previous year									

FINANCIAL YEAR

Approximate Statement of gross receipts of the Assam-Bihar State Railway

RECEIPTS FOR WEEK ENDING 22ND JANUARY 1887		RECEIPTS FOR WEEK ENDING 21ST JANUARY 1888		TOTAL RECEIPTS FROM 1ST APRIL 1887 TO 21ST JANUARY 1887		TOTAL RECEIPTS FROM 1ST APRIL 1887 TO 21ST JANUARY 1888		Total increase in 1887-88	Total decrease in 1887-88
Mean mileage worked	Receipts	Per mile worked	Mean mileage worked	Receipts	Per mile worked	Mean mileage worked	Receipts		
	Rs.			Rs.			Rs.	Rs.	Rs.
								18,084	18,084

* Audit up to week ending 11th December 1887

NALHATI STATE RAILWAY

Approximate Return of Traffic for the week ending 4th February 1888, on 27½ miles open.

	COACHING TRAFFIC		MERCHANDISE AND MINERAL TRAFFIC		Other earnings (estimated)	Total earnings	TRAFFIC TRAIN MILES RUN		
	Number of passengers	Coaching receipts	Weight carried	Receipts			Coaching	Merchandise	Total
		Rs A P	Mds S	Rs A P	Rs A P	Rs A P			
Total traffic for the week	3,598	1 374 0 0	20 170 0	934 0 0	10 0 0	1 384 0 0	11	1 011	1 022
Or per mile of railway	132	50 0 0	738 0	34 0 0	0 0 0	50 0 0	4	370	374
For previous 4 weeks of half year	11 761	4 154 0 0	71 433 0	3 777 0 0	11 0 0	3 788 0 0	111	1 011	3 899
Total for 5 weeks	15 359	5 528 0 0	91 523 0	4 711 0 0	21 0 0	4 732 0 0	122	1 382	4 914
COMPARISON									
Total for corresponding week of previous year	2,073	1 081 11 11	12 504 0	800 8 0	6 15 0	1 087 11 11	11	871	898
Per mile of railway corresponding week of previous year	109	39 11 0	460 0	29 11 0	0 4 0	39 11 0	4	320	324
Total to corresponding date of previous year	14 046½	5,206 1 11	75,904 0	4 061 3 0	147 10 1	5 217 1 1	117	1 001	4 315

FINANCIAL YEAR.

Approximate Statement of gross receipts of the Nalhati State Railway

RECEIPTS FOR WEEK ENDING 5TH FEBRUARY 1887.			RECEIPTS FOR WEEK ENDING 4TH FEBRUARY 1888.			TOTAL RECEIPTS FROM 1ST APRIL 1886 TO 5TH FEBRUARY 1887			TOTAL RECEIPTS FROM 1ST APRIL 1887 TO 4TH FEBRUARY 1888			Total increase in 1887-88	Total decrease in 1887-88
Mean mileage worked	Receipts.	Per mile worked.	Mean mileage worked	Receipts.	Per mile worked	Mean mileage worked	Total receipts	Per mile worked per week	Mean mileage worked	Total receipts	Per mile worked per week		
	Rs.	Rs.		Rs.	Rs.		Rs.	Rs.		Rs.	Rs.	Rs.	
27½	1,506	70	27½	2,323	85	27½	71,990	60	27½	78,493	65	6,503	

TIRHOOT STATE RAILWAY.

Approximate Return of Traffic for the week ending 4th February 1888, on 259 miles open.

	COACHING TRAFFIC.		MERCHANDISE AND MINERAL TRAFFIC.		Other earnings (estimated).	Total earnings.	TRAFFIC TRAIN-MILES RUN.		
	Number of passengers.	Coaching receipts.	Weight carried.	Receipts.			Coaching.	Merchandise.	Total.
		Rs. A. P.	Mds. s.	Rs. A. P.	Rs. A. P.	Rs. A. P.			
Total traffic for the week on 259 miles open	50,893	(a) 20,906 0 0	1,87,238 0	18,641 0 0	4,160 0 0	43,707 0 0	6,941	7,459	14,400
Or per mile of railway	196	80 11 0	723 0	72 0 0	2 15 0	165 10 0*	.....	.....	.....
For previous 4 weeks of half-year	107,091	65,395 0 0	7,60,237 0	76,192 0 0	16,832 0 0	1,58,549 0 0	27,162	31,841	58,993
Total for 5 weeks	217,784	86,301 0 0	9,50,495 0	94,783 0 0	20,992 0 0	2,02,050 0 0	34,103	39,300	73,393
COMPARISON.									
Total for corresponding week of previous year on 246 miles open	36,831	14,605 9 2	1,42,073 10	13,241 12 0	2,358 16 1	50,405 15 3	5,384	4,651	10,035
Per mile of railway corresponding week of previous year	150	59 10 0	578 0	53 13 0	1 1 0	114 8 0*	.....	.....	.....
Total to corresponding date of previous year	173,037	68,607 4 4	7,43,553 30	73,044 5 0	14,805 6 9	1,50,547 0 1	27,257	24,534	51,791

* Steam-boat earnings excluded in calculating "Total earnings per mile of Railway."
 (a) Increase is due to rush of passengers for "Maghi Purnamashi mela."

FINANCIAL YEAR.

Approximate Statement of gross receipts of the Tirhoot State Railway.

RECEIPTS FOR WEEK ENDING 5TH FEBRUARY 1887.			RECEIPTS FOR WEEK ENDING 4TH FEBRUARY 1888.			TOTAL RECEIPTS FROM 1ST APRIL 1886 TO 5TH FEBRUARY 1887.			TOTAL RECEIPTS FROM 1ST APRIL 1887 TO 4TH FEBRUARY 1888.			Total increase in 1887-88.	Total decrease in 1887-88.
Mean mileage worked.	Receipts.	Per mile worked.	Mean mileage worked.	Receipts.	Per mile worked.	Mean mileage worked.	Total receipts.	Per mile worked per week.	Mean mileage worked.	Total receipts.	Per mile worked per week.		
	Rs.	Rs.		Rs.	Rs.		Rs.	Rs.		Rs.	Rs.	Rs.	
246	30,426	124	259	43,707	169	246	13,25,286	192	251*41	15,06,720	196	1,81,434	.....

DARJEELING-HIMALAYAN RAILWAY COMPANY, LIMITED.

Rs.

Approximate earnings for week ending 28th January 1888	...	...	8,096
Corresponding week last year	...	...	7,218
Increase	...	...	878
Receipts from 1st to 28th January 1888	...	...	24,042
From 1st to 29th January 1887	...	...	20,490
Increase	...	...	3,552
			Miles.
Miles open, week ending 28th January 1888	...	...	51
Corresponding week last year	...	...	51
			Rs. A. P.
Receipts per mile open, week ending 28th January 1888	...	...	158 11 11
Corresponding week last year	...	...	141 8 6
Increase	...	...	17 3 5

DARJEELING, the 7th February 1888.

H. BRON, Acting Secretary, D.H. J.



SUPPLEMENT TO The Calcutta Gazette.

WEDNESDAY, FEBRUARY 22, 1888.

OFFICIAL PAPERS.

Non-Subscribers to the GAZETTE may receive the SUPPLEMENT separately on payment of Six Rupees per annum if delivered in Calcutta, or Twelve Rupees if sent by Post

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Abstract of the Proceedings of the Council of the Lieutenant-Governor of Bengal, assembled for the purpose of making Laws and Regulations under the provisions of the Act of Parliament 24 and 25 Vic., Cap. 67.

The Council met at the Council Chamber on Saturday, the 11th February, 1888, at 11 A.M.

Present :

The HON. SIR STEUART COLVIN BAYLEY, K.C.S.I., C.I.E., Lieutenant-Governor of Bengal, *presiding*.

The HON. G. C. PAUL, C.I.E., Advocate-General of Bengal

The HON. H. J. REYNOLDS, C.S.I.

The HON. C. P. L. MACAULAY, C.I.E.

The HON. T. T. ALLEN.

The HON. SIR HENRY HARRISON, K.T.

The HON. SIR ALFRED CROFT, K.C.I.E.

The HON. MOULVIE ABDUL JUBBAR.

The HON. G. IRVING.

The HON. BABU KALI NATH MITTER.

The HON. DR. MAHENDRA LAL SIRCAR, C.I.E.

The HON. C. H. MOORE.

The HON. DR. GOOROO DAS BANERJEE.

CALCUTTA AND SUBURBAN MUNICIPALITIES AMALGAMATION BILL.

THE HON. SIR HENRY HARRISON moved that the clauses of Chapter II, Part I, of the Bill to consolidate and amend the law relating to the municipal affairs of the Town and Suburbs of Calcutta be further considered for settlement in the form recommended by the Select Committee.

The motion was put to the vote and carried.

The HON. SIR HENRY HARRISON moved that in line 2 of section 9, for the words “(e) or (f)” the words “or (e)” be substituted.

The motion was put to the vote and carried.

The HON. SIR HENRY HARRISON moved that in line 1 of the fifth paragraph of section 9, for the words “a person qualified under clauses (a), (e) or (f)” the words “a person claiming to vote under clauses (a) or (e)” be substituted. He explained that this was a verbal alteration, the only difference being the substitution of the words “claiming to vote” for “qualified.”

The motion was put to the vote and carried.

The HON. BABU KALI NATH MITTAR moved that section 10 be omitted. He said:—This is an innovation introduced by the Select Committee. It was not in the Bill as it had been passed by the Committee on the former occasion. In his speech in Council on the 7th January last, Sir Henry Harrison by way of justification for this novel measure said:—

“It seemed to have been left out of sight altogether, he did not say by all persons, but by many, and he could cite several of the reports which had been addressed to the Council in illustration of this, that there was a middle course which widely differed in principle from this allegiance to majorities, viz., that it was advisable and expedient in the highest sense, in the cause of good government, that these classes and persons in the town who were most fitted to understand its interests and guide its administration wisely, should be associated together in that administration, and that, as these classes knew best who understood their views and their wants, they should not have representatives chosen for them by the Government, but should elect their own representatives as Commissioners. This principle held up fitness and not numbers as the final test, and nomination was expressly maintained side by side with election on purpose to secure a proper voice to the classes who possessed fitness without numbers. He himself had no doubt, and he thought that most of those he was addressing would agree, that this was the truer interpretation of the intention of the Legislature in introducing the elective system, and at any rate it was the only sound principle which could be applied to the government of a city like Calcutta. This was the view of the electoral system which he had consistently held from the time he had had any voice in the government of Calcutta, and he had observed that it led to continual misrepresentation of his views on one side or the other. If he said anything or wrote anything deprecating the divine right of majorities, he was accused of back-biting and of advocating official absolutism. If he said anything in praise of the good work done by the elected representatives, it was at once assumed that he was desirous of seeing democratic institutions introduced into India, or at least into Calcutta. Now the question of the plural vote did seem to him to have some bearing on this very important principle. We naturally took the English electoral system as our model, and there we found two systems working in local bodies: the system of one-man-one-vote and the plural vote. If anything, the plural vote seemed the more favoured, but in boroughs the one-man-one-vote system was the law.”

This change was made owing to the representation made by the Trades' Association. They object to the plural vote as it exists at present, on the ground that certain classes of persons get an advantage which they should not derive, and they suggested that the system of allowing the plural vote as it exists should be disallowed. On that suggestion the Select Committee thought fit to introduce this section in the Bill. It seems that if the present system of plural voting is objectionable, the mode of remedying it should be to abolish it, and not to allow different classes of the community still further power of plural voting. In all the elections of Town Councillors in English cities and boroughs, this system was not followed; the system of one-man-one-vote was rigidly adhered to. It was at parochial elections that plural voting was allowed, but such elections were different from those of Town Councillors, and were not so important. That being so, it seems to me that it would be infinitely better to take our precedent from the rules regulating elections in large towns and not from those which prevail in parishes. It is obvious that if the system proposed in the Bill be adopted, one of the principal communities in Calcutta would suffer very much—I mean the Mahomedan

community. In the first place they will suffer because the small number of Commissioners hitherto returned by them will be reduced by two, inasmuch as only two Commissioners will be allowed to each ward, instead of as at present three to some, which enabled them to return in each of the two latter wards one Commissioner from their body; and secondly, they will suffer, inasmuch as being a comparatively poor community they will not have the advantage of plural votes. It is a singular fact that all the Mahomedan Associations have unanimously objected to the system of plural voting, and entered their protest against it. The Mahomedan Commissioners have also in a body objected to it. In paragraph 4 of their representation they say:—

“We now come to the most important sections—we mean sections 10, 11, and 12—which provide for plurality of votes. It is a well-known fact that of all the three sections of the community, the Mahomedans are the poorest, their proportion to Hindus as regards landed property is concerned is not even 1 to 200; while their proportion to Christians as regards income is not even 1 to 100; such being the case, the result of these sections cannot but be most prejudicial to Mahomedan interests. It is stated that it has been the rule in England to recognise plurality of votes in measures of local self-government, and in support of their contention, the Select Committee have cited three Acts passed in different years. But we have learnt (*vide* Hon. Kali Nath Mitter's speech at the Municipal meeting of the 21st) that there is no town or borough in the whole of England enjoying the privilege of electing Town Councillors where the system of plurality of votes is allowed.”

and they conclude by saying:—

“It is true that the plural vote has hitherto been exercised in Calcutta. Members of Hindu and Mahomedan families had the privilege of voting separately, but so had the Europeans, each member of a firm or each of the occupiers of a house, if he paid proportionately Rs. 25, was entitled to vote separately.”

Then they have given a tabular statement, showing that, if the plural vote is allowed, they will suffer as well as the Europeans. How far that is a correct description of what is likely to happen I leave the hon. member in charge of the Bill to say. There can be no doubt that the adoption of the proposed measure will injure the prospects of the Mahomedans, and it may also injure the prospects of the Christian inhabitants of the town. I have not gone through the statistics with that amount of care necessary to be able to say whether that will be the inevitable result, but I have no doubt the hon. member in charge of the Bill will be able to enlighten us on the subject. So far, however, as the Mahomedans are concerned there is no difference of opinion. Now let us see what the Hindus say. The Indian Association in their representation of the 26th January say:—

“The Committee would beg to record their humble but emphatic protest against the principle of plurality of votes which has been recognised in sections 10 and 11 of the Bill. These proposals, the Committee submit, are distinctly retrogressive in their scope and they will serve to perpetuate invidious distinctions between voters. They cannot fail to concentrate enormous influence in determining the elections in the hands of a few wealthy families and mercantile firms. The Committee are not altogether without apprehension of particular wards being converted into pocket-boroughs by the operation of these clauses. Further, the clauses will operate with special hardship upon the Mahomedan community, the members of which are not generally wealthy, and for the most part live in houses that are not heavily rated. The Committee would in this connection refer to the provisions of the Mofussil Municipal Act to which some attention should be paid, as it is now proposed to incorporate a Mofussil Municipality. Under the Mofussil Municipal Act the one-man-one-vote principle prevails to such an extent that within the limits of the same Municipality a voter is not even allowed to have votes for different wards though he may have property in them. And the Committee submit that it is a salutary principle, as it prevents particular families and special interests from acquiring that preponderance in the Municipality which would be fatal to the interests of local self-government.”

The Indian Association, it is well known, represent the middle classes of the people, who will not be benefited by this system to the extent that they will be injured. Therefore their representation will not necessarily attract that amount of sympathy from the Council as that from another body who will mostly be benefited by this provision, and who are yet strenuously opposed to it. It is a fact impossible to deny that of all persons in the town the members of the British Indian Association will be mostly benefited by the plural vote, inasmuch as they represent the landed proprietors of the town, and necessarily will have a larger number of votes given to them. They say:—

“The Select Committee urge that if the one-man-one-vote principle is adopted, ‘it is certain that as the poorer rate-payers, who will everywhere be the majority, learn to use

their power, the status of those who present themselves for election will gradually but inevitably decline; while if wealth is given its due weight, better and more influential persons will be willing to offer themselves for election.' The Committee of the Association regret very much that they cannot subscribe to such a doctrine. If it were sound, the best course to follow would be to limit the franchise to the wealthy alone by raising the limit of qualification to a sum far higher than Rs. 25. The Parliamentary franchise has been gradually extended to include less wealthy classes than before, but it may be allowed that the status of members of the House of Commons has not suffered by the change. The qualification of a candidate in the Bill has been reduced to half of what it is under the law in force. If the status of the candidates was at all in question, the limit assigned to the qualification should have been raised, not lowered.

"The Select Committee ask: 'Are all rate payers, who contribute up to a certain minimum, to be placed on an equal footing, or are those who contribute most, and who, in the great majority of cases, are better qualified to judge of the needs of the Town, to have a more influential voice?' The last question involves a solecism. It can hardly be maintained that the ranks of those who pay most alone include persons who are qualified to judge of the needs of the Town; they may as well be found among those who pay least. The Committee would prefer to have, in the election of a candidate, the opinion of all such persons, whether found among the most or the least paying, and are unhesitatingly in favour of placing all rate-payers possessing the franchise on an equal footing."

Of the whole number of representations which have been received on this subject, all are in favour of this principle, except the Calcutta Trades' Association, which is not very much in favour of it, though it has accepted it. In their letter, dated 24th January, they say in paragraph 7:—

"The Committee have given their best attention to the provisions of sections 10 and 11, and are prepared to accept them as an improvement on the legislation hitherto proposed on this all-important matter. They cannot, however, but consider that too much weight is being still accorded to the owners of property at the expense of the tenants, and are of opinion that the scale for additional votes under section 10 should be reduced."

That is the only body, so far as the public is concerned, which is in favour of the system, whereas the representations of all other bodies are against it. Now as to whether it is a retrograde movement or not. Our predecessors in 1876 thought fit not to sanction anything of this kind, but they went so far as to object to the plural vote as it exists at present. At one period they were decidedly opposed to giving separate votes to individuals who possessed property in different wards, but ultimately, on the motion of the late Hon. Kristodas Pal, the Council was pleased to sanction plural voting as it now exists. The privilege, however, was of such a limited character that it would not justify the Council now to enlarge it, but rather, considering the objections against it, it would be necessary to curtail it. Finding so many persons opposed to the system of plural voting, I am not prepared to agree to such an innovation in the law.

The HON. MOULVIE ABDUL JUBBAR in supporting the motion said:—It does great credit to the hon. member to ask for the omission of section 10, and thus to plead the cause of the poorer classes of tax-payers. This section would not so much affect the interests of the community to which he belongs, but it affects seriously the interests of my poorer fellow-subjects, the Mahomedans. The principle of plurality of votes will not prejudice the Hindu rate-payers; but, as already observed by the hon. member, it will lay the axe to the root of the election of Mahomedans. If the new sections 10 and 11 of the Bill are not expunged, it will make the cause of the Mahomedans worse than it is; their return at the general elections will depend entirely on the suffrages of the Hindu electors.

The HON. DR. GOOROO DAS BANERJEE said:—I also support this amendment, which is in fact also an amendment of my own, and the object of which is to omit the provisions in the Bill relating to the scheme of plural voting. I do not contend that the principle of one-man-one-vote is always a perfect principle. But I oppose the scheme of the Bill—*first*, because it is not based on any sound principle or sufficient precedent; *secondly*, because it is not required to remove any inequality or injustice; *thirdly*, because it would be a source of evil in itself. And I adhere to the existing scheme, because under present circumstances the balance of convenience is greatly in favour of it. As the question involved is a very important one of principle, I beg leave to submit my reasons for it. Now the principle on which the scheme of the Bill is based is stated by the Select Committee to consist in "recognising the right of those

who contribute most to the maintenance of the Corporation to a more potent voice in electing the governing body." That would be justifiable only if it were true that all rate-payers had votes, and the duties of Municipal Commissioners consisted only in the application of the municipal funds, so as to give to the different classes of the rate-payers advantages proportional to their contributions. Let us see how far these assumptions are correct. Of course, if every rate-payer had a vote, then as the poor would always outnumber the richer classes, the latter might fairly claim the privilege of plural votes to restore the balance; but when, as is the case, the poorer classes who form the great majority of the rate-payers and pay small sums individually, but a large sum in the aggregate, are altogether precluded from voting, any scheme of plural voting for the rich, instead of restoring the equilibrium of interests, will have the effect of disturbing it most seriously to the prejudice of the lower ranks of the electoral body. Indeed, at one time, I had a mind to give notice of an alternative amendment to the effect that a scheme of multiple votes for the higher ranks of the electoral body ought to be supplemented by another scheme of sub-multiple votes for the lower ranks, so that two, three or more of the smaller voters might count as one. But I gave up the idea, not only with the view of avoiding complications, but because I am convinced that the pecuniary value of rates paid is no real indication of the qualification of the voter, but only an indirect test of a certain degree of intelligence, the really necessary qualification which cannot be directly tested in any other way. Now let us examine the other assumption and see how far it is correct. If the duties of Municipal Commissioners were like those of the Directors of Joint Stock Companies, and consisted merely in applying the funds to the greatest advantage of the different contributors in proportion to their contributions, then one might understand the propriety of giving to the rate-payers votes in proportion to the rates they pay. But the duties of Municipal Commissioners are really of a very different nature. It is true that they have to spend municipal funds for municipal improvements, though I may observe in passing that if the plan which has been recently adopted in connection with the opening out of a certain road were to meet with general favour, improvements could be effected without any cost but rather at a profit to the Corporation. But let that pass. Municipal Commissioners in spending the funds of the municipality for effecting improvements for the benefit of the rate-payers should have regard more to the magnitude of the wants of the rate-payers than to the magnitude of their contributions. This is their plain duty: to do anything else would be a gross dereliction of duty. On this ground no case can be made out. But this is not all. Besides spending money and doing other acts affecting the property of the rate-payers Municipal Commissioners have other far more important duties to discharge which concern the convenience, the comfort, and the health of the rate-payers, and these are matters in which I submit the poor have from the very helplessness of their condition much greater interests at stake than the rich. Therefore I submit it is not easy to understand how on principle it can be maintained those who contribute more largely ought to have a greater voice in the election of the governing body. And mark the extremely artificial and unsymmetrical character of the scheme proposed. While the unit vote corresponds to a certain annual value of the property of the rate payer, double, treble and other multiple votes do not rise in proportion to the increase in that annual value, and the scale stops suddenly with the additional tenth vote given. For aught one knows there is no reason why it should not go on multiplying up to, say, the fiftieth, or why it should not stop at the fifth. I do not wish to be hypercritical, but I submit that the burden lies heavily on those who propose an artificial scheme like this in supersession of the natural scheme of one-man-one-vote, to make out not only the general fitness of the scheme, but to establish every matter of detail it involves. For by stopping short at any one point, we may be unwittingly giving an advantage to one section of the community at the expense of another. Were the scale to stop at 15 or at 5, it might have had just the opposite effect. So much for the principle of the scheme.

Now let us examine how far it is supported by precedent. The English Statute Book has been referred to, and the Public Health Act of 1875 has been cited as a precedent. My hon. friend, the mover of the amendment, has already pointed out to the Council that the Public Health Act applies to small

parishes and unions, but without taking any notice of that, and without saying anything as to the difference in condition of the two countries, it will be sufficient to observe that if the Public Health Act of 1875 furnishes a precedent in favour of the proposed scheme, the English Municipal Corporations Act of 1882, which is a later enactment, supports quite a contrary view, and is decidedly in favour of the principle of one-man-one-vote. Then as regards the Calcutta practice, the instance which has been referred to of members of joint Hindu families voting is, I submit, no instance of plural votes. When a joint Hindu family or a joint Mahomedan family pays a certain rate or tax, the payment of that tax or rate is a sufficient test of the status of the family and of the possession by the members of that family of the requisite degree of intelligence. It also proves that they own property in the municipality. And these conditions being satisfied, there is nothing wrong in the individual members of that family being allowed separate votes. Nor even is the fact of the same individual having votes in different wards an instance in point. Each ward constitutes a distinct electoral unit, and if a man is qualified to take part in the election of each of these units, there is no reason why he should not be allowed to do so. So much for the principle and precedents upon which the scheme is based.

A scheme so little supported by principle or precedent should require the strongest grounds of necessity for its justification. But the only ground of necessity which has been brought forward, either in the report of the Select Committee or in the speech of the hon. member in charge of the Bill, consists in this, that wealthy and influential voters will not be induced to take part in the elections, unless you raise the importance of their votes, and that unless they take part in the elections, the status of candidates for election will decline. I should be most reluctant to accept this view as correct. Indeed the former of these two propositions reads almost like a libel against wealth and influence. But if this view is correct, with all my respect for wealth and influence, I feel bound to say that the wealthy and influential voter who requires the not very creditable stimulus of personal vanity to induce him to take part in the elections, is not likely to raise the tone of the elections very much. The truth, however, is, as I imagine, that the rich and influential keep aloof from these elections out of mere indifference, induced by a confidence, generally well founded, that their interests are not likely to be neglected, whatever the results of the elections may be. They further know and feel, and we should also bear that in mind, that even where their interests are neglected, the consequences of such neglect to them will not probably be so injurious as in the case of others. These then are the real explanations why, comparatively speaking, the poorer rate-payers, the educated middle classes, take such a lively interest in the elections, while the rich and influential keep aloof. But we should also bear in mind that whenever the rich and influential condescend to take part in the elections, their position and influence always exact for them such deference to their views from numerous bodies of tax-payers within the range of their influence—and all this without any coercion or undue influence exercised on the part of any body—that they really enjoy the privilege of having many more votes than one: so that in the self-adjusting economy of nature wealth and influence have all that they deserve without our aiding them with any artificial scheme like this. I would also advert to the letter of the British Indian Association. That Association represents the wealth and influence of the native community; and by opposing this scheme, it has not only borne ample testimony to the healthy influence exerted by the educated middle classes in this matter, but has furnished the strongest evidence against any necessity for the proposed change.

Lastly, I submit that the scheme proposed will be productive of evil. It will, to say the least, mar the growing popularity of our municipal institutions. I beg leave here to refer to the words of a great English thinker, who has written on the subject:—"I do not deny," says John Stuart Mill, "that property is a kind of test; education in most countries, though anything but proportional to riches, is on the average better in the richer half of society than in the poorer. But the criterion is so imperfect; accident has so much more to do than merit with enabling men to rise in the world; and it is so impossible for any one by acquiring any amount of instruction to make sure

of the corresponding rise in station, that this foundation of electoral privilege is always, and will continue to be, supremely odious. To connect plurality of votes with any pecuniary qualification would be not only objectionable in itself, but a sure mode of discrediting the principle, and making its permanent maintenance impracticable." And if this is true in England, where wealth and intelligence have had sufficient time to adjust themselves to one another, it must be still more true in this country, where honorable poverty and indigenous Oriental learning have ever gone hand-in-hand where proverbially Lakshmi and Swaraswati, the goddesses of wealth and intelligence, are in perpetual discord, and where Western education, which may not underrate wealth so much, is an exotic plant of but recent importation. Considering the poverty of the people for whom these elections are meant; considering that we are about to extend the limits of our municipality suddenly and to increase taxation over a large additional area inhabited by a poor population; considering also that our municipal administration has to interfere constantly and minutely with the daily life of a heterogeneous body of rate-payers—considering all these things, I do submit that it is desirable, for every imaginable reason, that the popular element in the electoral body should have the preponderance. This is the only way in which we can secure popular confidence and disarm popular opposition. Measures of municipal improvement very often involve the certainty of present inconvenience and hardship, with perhaps but a doubtful chance of future good. And men of advanced ideas, who have been styled the party of progress—I say it in no disparagement of them—are apt often to be led away by enthusiasm to force their measures of reform without due regard to the capacity of the people. In such cases, unless their measures are leavened largely with the element of goodness and sympathy for the people, which can be secured only by having the popular element present in a large degree, their measures are sure to prove distasteful and oppressive. It is therefore in the true interests of progress that I would oppose this scheme, which would earn for municipal government the not very enviable name of oligarchy of wealth.

The HON. SIR HENRY HARRISON said:—The objections which have been raised to the plural vote are partly that it has been vehemently opposed by the leading Associations and the outside public, and partly that it is a novelty and not sufficiently supported by precedent. I attach much more importance to the second of these objections than to the first. If it is true that this is a practical novelty, and also that it is not supported by the precedent of local self-government in England, I shall be much less sanguine of the propriety of introducing it than I am. I understand that we are now discussing the principle of plural voting and not the details. I am much surprised that no hon. member has suggested any alterations in matters of detail, because I am far from sanguine that the details of the Bill in respect of plural votes are the best that can be devised. But in voting on the principle of plural votes, we should not allow questions of detail to influence us in its consideration. The proper way to meet objections as to details would be to suggest modifications in those details; and therefore, until such modifications are proposed, it should be remembered that we are discussing the question of principle only, and all who support the principle ought to vote for it even though they may differ as regards details. The plural vote, as has been pointed out in the report of the Select Committee, has been exercised in Calcutta substantially from the outset. The provision by which everybody who has paid Rs. 25 is entitled to vote could be worked in such a way that all the members of a joint Hindu family could vote, and as a matter of fact in a considerable portion of the town the plural vote has been exercised to a very large extent. It really has been the case that in some instances a constituency has been almost swamped by one or two rich houses. I therefore thought it necessary to introduce some check, and therefore the check was to limit the plural vote to six members of a family. Up to that stage not a word of objection was raised by the public against the plural vote. That practice has prevailed for four elections in succession. Next, the exercise of the plural vote was enlarged in the Bill so as to include to the same extent Europeans in association as partners. Still no objection was heard. Eventually the first objection came from the 'Trades' Association, which in an extremely intelligent and well-considered representation pointed out

that to some extent the plural vote even as modified handicapped Europeans, and I then suggested that we should not abandon the principle that paying higher taxation should give higher representation, but should make it absolutely equal for all communities, and make it more intelligible by making it an undisguised plural vote. As the Europeans on the average pay higher rates this evidently tended in their favour, and as soon as this was done, the proposal was received with a chorus of disapprobation from all the Native Associations. Not only from the Mahomedans, against whom the principle would tell most severely, did objections come, but from a community who ought not in principle to object, and who would scarcely, if at all, lose by it. I think this fact is very suggestive indeed. I will return to this hereafter. Now as regards the question of novelty, how far can it be supported by English precedent? I say that it has overwhelming precedent in favor of it. It is perfectly true that in the elections of Town Councils in England the principle of one-man-one-vote obtains, but the boroughs have been at all times the stronghold of English democratic feeling from which the liberal party has drawn its chief support; but my hon. friend overlooks the fact that that system was as widely different from the system in Calcutta as possible. The first principle of that system was that an owner was not allowed a vote *quâ* his ownership. Are those who object to the system of plural voting prepared to adopt that principle as well? If they wish to take English towns as their model, they should be prepared to follow the example in its entirety. But the Parliamentary boroughs excepted, at every step of English legislation you will find the plural system introduced. The primary unit was the parish where the plural vote was allowed not only at elections, but actually in voting on measures. The most important unit of local self-government in England is that of the unions in which parishes are united into unions, which dispose of more taxation than any other body. Unions have always been governed by a mixed body consisting partly of *ex-officio* members, namely, the Justices of the Peace, and partly of guardians elected by the system of plural voting. When highway guardians were constituted, there again the principle of plural voting was adopted. So again when the Commissioners of Sewers and Burial Boards were appointed, they were elected by the system of plural voting. Then came the Local Government Boards for the improvement of sanitation, and here also you have the same system of plural voting up to a maximum of six votes. In 1870 a Select Committee was appointed by the House of Commons to consider the system of local taxation. This Committee was under the Chairmanship of Mr. Goschen. The report of this Committee was, I believe, the last authoritative report issued on this subject. The system of voting was specially examined into by them, and the Committee refused to condemn the plural system though specially asked to condemn it by the Chairman. On the other hand they did report unfavourably of the borough system of voting by which owners were excluded. Five years after this report was sent in, we had the all-important Public Health Act of 1875. I listened to my hon. friend with great care when he referred to that Act, and I thought it very extraordinary that he should refer to it, as it was so entirely against him, but he passed it over lightly, and went on to the Municipal Act, 1882, which was simply a consolidating Act. That Act recognised the system which had always prevailed in towns of the one-man-one-vote principle, and nothing more. But the Public Health Act of 1875 was a fundamentally construction Act. By it the whole kingdom was divided into 985 urban sanitary districts with a population of 14 millions, and 575 rural sanitary districts with a population of 8½ millions; and in these urban sanitary districts Local Boards were elected by plural voting, the maximum being six times the minimum. These urban sanitary districts in a great many instances included boroughs, and the Local Boards exactly adopted the recommendation of the Committee of 1870. So here is an Act thirteen years old—an Act passed after a Parliamentary Committee had reported on the subject, we had this principle adopted for the whole country; and if we are to follow English precedent, I cannot see how it can be said that the plural vote is a novelty or without sufficient precedent.

That being so, let us turn to the principle itself. At first sight it commends itself to the most ordinary intelligence. Taxation or the payment of rates is

the basis of representation, and it naturally follows that the higher the taxation, the higher should be the share in the representation. We know that in certain countries and for certain reasons that system is condemned. Mr. John Stuart Mill is only one of many radical writers who could be referred to to prove that in the advanced democratic stage that principle is objected to; but India is not in an advanced democratic stage. Therefore, if we in India allow representation in return for taxation, why should we say that a person who pays higher taxation should have only the same vote as a person who pays much less? The objection to plural voting is taken by two sections of the community; by the Mussulmans who naturally object, as they are the poorest rate-payers; but they will not lose relatively to what the state of things was before. In the case of the Hindu tax-payers, the plural vote is already exercised. No person would suppose that naturally the Hindu voters in the town would be eight times as much as the Mahomedans, and yet, except in the last elections, it has been much more. But no doubt the Mahomedans will lose the position which they would occupy under the one-man-one-vote system, if the principle of the plural vote is adopted, and I shall very much regret it. That is one of the details which I regret as the result of the system, but I cannot admit that because one community is poorer than another, a system of such extreme importance should be thrown over. Then when we come to the Hindus, I think the strength of their opposition is in inverse proportion to the force of the arguments adduced to justify it. To make his position strong, my hon. friend was obliged to pose as the champion of the Mahomedan interest. The moment he passed to the objections of his own community, his arguments grew weak. We find the opposition as unanimous as possible amongst their public bodies, but the reasons for that opposition are to be sought for anywhere than in the arguments ostensibly advanced. This is due to one of two causes. The Hindus in their own wards most unquestionably will not lose as a body by the plural vote. the only question will be as to the number of votes they can give in the other wards? Is their opposition then due to their desire to influence more potently the elections in the European wards—the Chowringhee and Theatre road wards. I do not believe it is so. I believe they will be perfectly satisfied to see Europeans have the representation of their own wards. I feel no doubt that the secret of their opposition is that they see in the plural vote a principle which makes something besides bare numbers the basis of representation, and that is precisely the very reason why I press the Council to adopt the principle of plural voting. The Council has heard an extract from the report of the British Indian Association read, but I have had a letter sent to me by a gentleman well known to the Council, himself an ornament to the High Court from which he has retired, and also once a member of this Council—I mean Babu Mohiny Mohun Roy. The letter is addressed to the Council, but I have his leave to read it in the first instance.

“I request you will be so good as to lay before the Legislative Council the following remarks and suggestions which I beg to offer on the provisions for plural votes contained in the amended Municipal Bill. —

I. The principle of plural votes has my hearty approval. It has caused me some surprise and regret to find that Associations which represent very conflicting interests, and which seldom agree in anything, have rushed in to oppose a principle so just and equitable. ‘When they do agree, their unanimity is wonderful.’ My legal experience has taught me, however, that judgments from which both the contending parties appeal are rarely wrong.

II. The rule of one-man-one-vote is founded upon socialistic notions and is wholly foreign to Hindu ideas. Where the elective franchise is high, the rule may be worked without much manifest disadvantage. But its practical disadvantages come prominently into view where the franchise is low. There the masses completely swamp the classes and carry the elections, and are themselves carried by artifices and electioneering tactics which no one would wish to see take root as an institution in India but which are fast growing with the growth of the elective system in our municipalities.

III. You can cure this growing evil in either of the two following ways —By raising the elective franchise, or by making such an equitable distribution of the votes as to give a larger voice at the elections to those who bear a larger share of the burden of municipal taxation. The first is objectionable, in that it will altogether disfranchise a large number of persons. The second, which is no other than the scheme of plural votes, recommends itself at once to our minds as the right remedy. It will not disfranchise any body, but it will effect a cure by a much milder treatment, viz. by lowering the value of each vote. The depreciated value will be the ratio between the number of present votes (n), and the

same (n) plus the additional votes (m) which will be given to plural voters. The Algebraic expression for the depreciation will be as follows :—

$$\text{Depreciation} = 1 - \frac{n}{n+m} = \frac{m}{n+m}.$$

IV. I have no data for making the calculation. But I am certain that the additional votes will never come up to anything like the present votes. There is, therefore, no ground whatever for supposing that the plural voters will have it all their own way, and the objections founded upon such fine phrases as plutocracy and oligarchy will necessarily lose some of their force. I am only afraid that the scheme, with the proposed limit of six additional votes, will be inadequate to give the plural voters—that is, persons of wealth, position and respectability—such a potent voice at the elections as may be desirable in the best interests of municipal administration.

V. I have always held a very strong opinion in favour of plural votes. After the Committee of the British Indian Association had sent in its communication, I saw several leading members of the Association, and they agreed with me that it was a very good principle and one quite in unison with Hindu ideas and feelings. Outside of the many Associations with which Calcutta is blessed, I saw several native gentlemen of education and position, and explained to them the principle of plural votes. They felt surprised that any possible objection could be made to it."

The letter then contains a suggestion which I need not take up your time by reading. I read this letter not so much on account of the weight due to the writer's opinion, but on account of the clear and forcible manner in which he has explained the principle which I am anxious to introduce into the representation of this town. We cannot raise the elective franchise without disfranchising a great many persons who now exercise it. We have gone low enough, but do not go lower still. But we endeavour to reclaim their fair and legitimate influence to the more wealthy persons and those who pay a larger share of taxation by the system of plural voting. It is all very well to say that as the lower classes have no votes you must maintain the principle of one-man-one-vote as a kind of average counterpoise. I protest altogether against putting the whole power into the hands of the middle classes as we find them in Calcutta. Poor men of light and learning are by no means the representatives of gharrymen and hackney carriage owners, of petty shopkeepers and men of the labouring classes. I therefore strongly press the plural vote on your acceptance, for what I am sure is the very reason that the Hindu Associations oppose it, viz., that it asserts the principle that Calcutta is a city in which wealth and intelligence, and not numbers only, should be entrusted with power.

Lastly, there is a point of very great practical importance which has not been touched upon, and that is that we are introducing the system of polling with the object of purifying the elections. So far as polling is concerned, it has been truly pointed out that it will operate in a way which will be regrettable, namely, that a great number of the more influential will abstain from voting. But I am sanguine that if the principle of plural voting is carried it will go far to correct that. When it is known that a person can give ten votes, pressure will be put upon him, and he will sacrifice a little time to give his votes. But when he knows that his vote is simply a unit, that its effect will be cancelled by the very next man who pays a rate of Rs. 25 and goes to the poll, it will be a strong temptation to him to say that he cannot afford the time, and that he does not care to give his vote.

On these grounds, I shall be sorry if the Council does not see its way to adopt the system of plural voting.

The Hon. SIR ALFRED CROFT said:—The hon. member who has just sat down suggested in the beginning of his speech a means of escape from what I felt to be a position of considerable difficulty. He suggested that those in favour of the principle of plural voting should vote against the present amendment, but should afterwards propose any modification as to details which they thought desirable. I may state at once that I am in favour of the principle of plural voting for reasons with which, after the speech of the last speaker, I will not trouble the Council. I agree, as I said on a previous occasion, that the principle which should govern the electoral qualification is the having a pecuniary stake in the town, and the greater the stake the higher the qualification; but that is just the reason why the provisions of sections 10 and 11, when compared with one another, seems to me to be inequitable. The scales in these two sections, for owner and for occupier, respectively, are precisely the same, but because they are the same, they produce

an inequality of a serious character. The difference between that stake in the town which the owner has and which the occupier has, in respect of property of the same value, seems to me to be very great; and I cannot avoid the conclusion that by these two sections the owner of property gets far more than his position entitles him to. To narrow the point, I will compare one additional vote given in section 10 on an annual rating of Rs. 600, with one additional vote given in section 11 on the same rating. Is it possible to say that the owner of a house rated at Rs. 600 is a person of the same wealth and position as the occupier of the same house? It seems to me that the occupier is in a far higher position. All we know about the two men is that one is the owner and the other the occupier. Therefore, so far as the terms of the section go, the owner has an income of Rs. 600 only, while the occupier must have an income of a great deal more, because he pays Rs. 600 for the mere rent of his house. In England it is commonly estimated that the rent a man pays for his house should be 10 per cent. of his income. In India it is probably higher; and if we put it at one-fourth or one-fifth, it will perhaps be nearer the point. On the principle to which I refer, the occupier of such a house would seem to occupy a position equivalent to that of the owner of a house rented at Rs. 2,400 or Rs. 3,000. I would therefore ask leave, while accepting the basis upon which section 10 is framed, to propose a modification of it, viz., that the left-hand column of section 10 should be multiplied by four throughout, so as to increase the ownership qualification. I suggest this merely by way of indication of what I mean, without binding myself for the moment to any particular scale. But assuming the scale I have named, the result would be that one additional vote, which in the case of an occupier would be given by the occupation of a house rated at Rs. 600, would in the case of an owner be given by the ownership of a house rated at Rs. 2,400.

The HON. BABU KALI NATH MITTER said:—As the arguments for and against the principle of plural voting have been fully laid before the Council, I shall be as brief as possible in my reply. With reference to the complaint of the hon. member in charge of the Bill that this objection was not taken at an early stage, the answer is very clear, namely, that what the Select Committee at first did was to put into the law the existing state of things, and therefore nobody took any exception to it. If the hon. member thought the existing state of the law objectionable, it was his place to have taken the objection. Instead of that, he himself proposed what was first introduced, and it was adopted. There is this difference between what was then adopted and what is now proposed; whereas in the one case individuals had votes, in the other case the vote is given to property. That is the principal difference between the two cases, and the difference is of such importance that one must be struck at it. It is said that the members of joint Hindu families have hitherto exercised the right of plural voting. But in what way? They have to show that each of the members of the family pays a sufficient amount of rates to entitle him to vote: when they establish that fact, they are allowed to vote. But is the case precisely the same now? No; now the head of a family who pays large rates, instead of exercising a single vote, would have 10 or 12 votes; and therefore the difference is very great in principle. We are not legislating for parishes and unions, but for the metropolis of India, and therefore we should follow the principle adopted in large English towns, and not the principle followed in parochial elections. But my hon. friend prefers to follow the precedent of the small elections in parishes and unions, which are nothing more than a certain number of parishes added together. My hon. friend, as a sort of threat, asked whether owners are prepared to be dealt with precisely in the same way as the law deals with them in England, but he forgets one important thing, namely, that in England owners have not to pay rates. There owners do not pay rates, and therefore they do not vote. Here you make the owner pay rates, and yet you ask whether he is prepared to be dealt with in the same way as under the English practice. If the offer were made to owners to be relieved from the payment of rates if they would give up the privilege of voting, it is not very difficult to conceive what the answer would be. Therefore we must not be staggered with that argument; it has no bearing on the matter, and it does not in the least help my hon. friend. I would ask whether the Hindus, as a body, would lose by this provision. I say they would not,

and yet they unanimously object to it. Therefore my objection to this principle becomes very forcible, because it comes from a quarter which is likely not to be affected by it. My hon. friend says, if the Hindus will not lose by it, why then all this agitation? They object to it on the ground that it is a retrograde movement altogether. Then my hon. friend also points out that no notice was taken of the argument advanced by him on various occasions in support of this principle, that rich and influential people will much sooner go to the polling stations, if they had a number of votes to give and could thus largely influence the return, than if they had only a single vote, like any ordinary rate-payer. If that is so, then the remedy is this, that instead of compelling persons to go to the polling stations, the present practice of voting by means of voting papers should be maintained—it would be a mistake to raise the importance of any particular class of the community, simply because it is anticipated that persons representing it will not otherwise go to the poll. In the same way, to meet the objection of the 'Trades' Association you should disallow all plurality of votes, and not give plurality of votes to all classes. My hon. colleague must have noticed one of the amendments on the notice paper (No. 18), which runs thus—that “in the case of joint-owners the principal member shall be entitled to vote, and in the case of joint-occupiers the one who pays the largest share of rates, or in whose name the rates are paid. Should there be any dispute as to the person who would be entitled to vote amongst the joint-owners or joint-occupiers, the Chairman shall decide between the contending parties.” From which it will be seen that I anticipated this objection, and am prepared to make this sacrifice on behalf of the rate-payers, by treating the large owners in the same way as other voters, though it should not be forgotten that in the case of elections of members of the House of Commons plurality of votes is allowed to persons having property in different districts. It is on this ground that plurality of votes is allowed under the present Municipal Act. As to allowing plurality of votes to joint-owners and occupiers in coming to construe the law, it was considered that as it enacted that whoever paid on his own behalf rates to the amount of Rs. 25, members of joint undivided families, who paid rates amounting to Rs. 25 per head, were entitled to vote. If that is a ground of complaint let it be removed; but it does seem to me that neither that complaint, nor the complaint that rich and influential persons will not go to the polling stations, are such as to justify our adopting plurality of votes.

The motion being put, the Council divided :—

Ayes 4.
The Hon. Dr. Gooroo Das Banerjee.
The Hon. Dr. Mahendra Lal Sircar.
The Hon. Babu Kali Nath Mitter.
The Hon. Moulvie Abdul Jubbar.

Noes 9.
The Hon. C. H. Moore.
The Hon. G. Irving.
The Hon. Sir Alfred Croft.
The Hon. Sir Henry Harrison.
The Hon. T. T. Allen.
The Hon. C. P. L. Macaulay.
The Hon. H. J. Reynolds.
The Hon. the Advocate-General.
His Honor the President.

So the motion was negatived

The Hon. SIR ALFRED CROFT said :—With the permission of the Council, I beg to move the following amendment :—

“That in the second clause of section 10, for the figures ‘600, 1,000, 1,500, 2,000, 2,500, 3,000, 3,500, 4,000, 4,500, and 5,000,’ the figures ‘1,000, 2,000, 3,000, 4,000, 5,000, 7,500, 10,000, 15,000, 25,000, and 50,000’ respectively be substituted.”

I will not detain the Council with more than a very few words in support of this amendment, because I have already stated the grounds upon which the principle involved in it is, in my opinion, reasonable and fair. There are only one or two points I wish to notice. It will be observed that instead of a simple multiple of four, which I suggested a few minutes ago, a sliding scale, ranging from Rs. 1,000 to Rs. 50,000, has been substituted. Next, it has been pointed out to me that there are two arguments which may be used against my proposition, and which certainly escaped me when I submitted it to the Council just now. The first is that the principle of equal electoral power in respect of ownership and occupation has already been accepted in section 8, under which

the owner and occupier alike have each one vote if the property in respect of which the vote is given is of the value of Rs. 300 a year. That no doubt is a fair argument against the proposal; but I conceive that the practical importance of it is but small, and that the real importance of this principle comes in when the higher values are reached. The second argument is based on the fact that under the Municipal Act the owner and the occupier pay rates equally, and therefore are presumed to have an equal stake in the town. Still, even that I would not accept without some reservation; because it appears to me that the business done by the occupier of a house such as the Great Eastern Hotel, and the transactions that he carries on in respect of such occupation, are very much larger and more varied than those with which the owner of the house as such is concerned. I do not deny the force of those considerations, but I should still wish to submit the point to the decision of the Council.

The HON. THE ADVOCATE GENERAL said:—I am very much surprised at this amendment, which seems to me to rest upon a principle unsound and unsubstantial. I understood the hon. member in charge of the Bill to say that the extension of the principle of plural voting arose from this, that it had hitherto been the practice to give additional votes in certain cases according to the amount of taxes paid by rate-payers, and on that the principle of regulating votes according to the amount of taxes paid recommended itself as a sound one. This Bill contains a provision that a consolidated amount of taxes is to be divided between the owner and occupier. Starting from that point of view, it is obvious that the occupier who occupies a house of the annual value of Rs. 600 should have the same number of votes as the owner of that house. The principle underlying plural votes, as disclosed by the Bill and maintained by the mover, is in direct conflict with the principle (if any) on which the amendment is rested. A strange proposition has been enunciated. The hon. mover of the amendment contends that a man who pays Rs. 600 annually for the house he occupies in this town must be necessarily considerably wealthier than the man who owns that house. I am not prepared to admit that proposition. I know a number of men who occupy houses at Rs. 300 per month or more who do not possess half the wealth of the owners of such houses, and it is only in regard to a house in which the occupier dwells the hon. member's contention can be supposed to make an approach to the startling proposition he desires to maintain; the moment it is assumed that the house occupied is used as a shop, boarding-house, or for any other purpose of trade, the asserted proposition falls to the ground. It is needless to say more on this subject, as it must be apparent the more the matter is probed the weaker it will become.

The HON. SIR HENRY HARRISON said:—The Hon. Sir Alfred Croft's proposal is, as the learned Advocate-General has pointed out, an extension of the principle of the plural vote, but I do not think it is a contradiction of it. Assuming that greater taxation should be recognised as a ground for higher representation, the argument comes nearly to this, that a person who pays the higher taxation is on the average more intelligent and understands municipal wants better than persons who pay a lower rate of taxation. Although it may be sometimes true that the occupier of a house of Rs. 5,000 may not be richer than the owner of that house, if the owner has ten such houses he will get votes for each such house in other wards. My own views are very divided as regards this amendment. I am satisfied with the Bill as it stands, and I do not think the owner will have any undue weight under it. In the Parliamentary Select Committee already referred to their efforts were entirely in the other direction, their fear was that the occupiers would outvote the owners; and they proposed as a distinct recommendation that the owners should vote separately from the occupiers and should have separate members. I have no objection to see my hon. friend Sir Alfred Croft's amendment adopted; but I regard it as a new development of the principle adopted by the Bill.

The HON. DR. GOOROO DAS BANERJEE said:—I will add my feeble voice to the forcible opposition of the hon. the Advocate-General against this somewhat strange and startling amendment. One could understand the principle that wealth contributed to the Municipality might be made the basis of representation. But that is not the amendment before the Council, and we find

not wealth contributed by the voter, but wealth possessed by him proposed as the basis of representation. Such a proposition nobody has yet heard of. It has been said that a man who pays a rent of Rs. 600 for a house is a richer man presumably than the man who owns the house. That may or may not be the case. The question was not whether a man was richer, but whether he contributed more to the Municipality. The hon. mover of the amendment has not been able to assert that the man who pays Rs. 600 as house-rent is necessarily more intelligent. Wealth may vary with the rates levied, but intelligence does not so vary. It may be that a man who pays Rs. 600 house-rent may have larger concerns to carry on, and for that purpose a greater interest in the affairs of the Municipality, but the hon. mover of the amendment forgets what is very evident, that a man who owns a house has a more abiding interest than the sojourner who comes here for the exercise of his profession, or his calling, and then leaves the country. Any municipal improvement which may be carried out has a permanent effect on the property of one man, but only a temporary effect as far as the other is concerned. From this point of view also, I submit that this amendment should not be supported.

The motion was put to the vote and negatived.

The HON. SIR HENRY HARRISON moved that for the first paragraph of section 10, the following be substituted —

“A person qualified to vote under clause (b) of section 8 may give two votes in each ward in which he is entitled to vote, or one vote if only one Commissioner is to be elected for that ward, as well as additional votes according to the following scale. —”

The motion was put to the vote and carried.

The HON. SIR HENRY HARRISON moved that for the first paragraph of section 11, the following be substituted —

“A person qualified to vote under clause (c) of section 8 may give two votes in each ward in which he is entitled to vote, or one vote if only one Commissioner is to be elected for that ward, as well as additional votes according to the following scale. —”

The motion was put to the vote and carried.

The HON. SIR HENRY HARRISON moved that for the first paragraph of section 12, the following be substituted:—

“A person qualified to vote under clause (d) of section 8 may, if he holds a license under Class IV of the third schedule, give two votes, or one vote if only one Commissioner is to be elected for the ward in which he may be entitled to vote under this qualification; if he holds a license under Class III, one additional vote; if under Class II, two additional votes; if under Class I, three additional votes.”

The motion was put to the vote and carried.

The HON. SIR HENRY HARRISON moved that in line 2 of section 13, after the word “includes” the words “a Hindu joint family” be inserted; and that in line 3, after the word “or” the word “other” be inserted.

The motion was put to the vote and carried.

The HON. DR. GOOROO DAS BANERJEE moved that for the fourth paragraph of section 9, the following be substituted:—

“A person qualified under clause (a) of section 8 shall vote in the ward in which his place of business is situated, or in the ward in which he resides.”

The object of this amendment, he said, was shortly this. A rate-payer possessing the necessary qualification by reason of his paying a license fee in respect of his business may reside in one ward, and have his place of business in another. Presumably, he is interested in the welfare of both the wards, and ought to be allowed to vote in either. Where his place of residence has more permanence or more importance, he would select that as the ward in which he would vote. There are other instances in which the reverse may be the case and the voter may prefer to vote in the ward in which he has his place of business. But in either case he is the best person to decide the affairs of which ward interest him most, and therefore he ought to have the right to choose the ward in which he will vote, instead of the Act fixing the ward for him. My amendment leaves him that option to the fullest extent, whereas the clause of the Bill does not. Therefore I submit that the amendment meets the requirements of the case better than the provision in the Bill.

The HON. BABU KALI NATH MITTER said:—The Bill, as originally passed by the Select Committee, contained this clause:—“A person qualified under clause (a)

shall vote in the ward in which the person exercises his calling or carries on the business in respect of which the license is taken out." My hon. friend the mover of the amendment wants to extend that principle, and leave an option to the person as to whether he will vote in the ward in which he lives, or in the ward in which he carries on his business. That is a further extension of my own amendment, and I support it. But the real object of the amendment is this, that, if the proposal of the Select Committee is carried, a very large number of persons carrying on business in Ward No. 12 will not be able to vote in that ward. The whole of the barristers, pleaders, and attorneys, who at present can vote in that ward, will be precluded from voting if this provision of the Bill is not altered. I think they are persons eminently qualified to select their representative, and I do not see why they should be deprived of the right of selection. In the report of the Select Committee, it is pointed out that in Ward No. 12 the resident voters suffer, because these outsiders elect one or two members by their numbers. As the Bill provides that each ward should return only two members, the resident members will return one, and probably the barristers, pleaders and attorneys the other. A great deal of importance has been attached to the residential voters, but after the provision which has been passed by the Council allowing the Trades' Association to elect four members, they will be persons who will be most interested in Ward No. 12, and they will have another member elected under the general clause. I do not see why it is necessary to deprive this non-residential class of the right of voting in this ward for the benefit of the residential voters. If you do so, you will deprive a large number from voting at all. Suppose four persons living in Howrah carry on business in Calcutta; they will, under the Bill, have no vote at all; whereas if they are allowed to vote in the ward in which they carry on business, they will then be able to vote. I am told by the hon. mover of the Bill that residence in the town is meant, but the hon. and learned Advocate-General will no doubt tell the Council that there is a decision on the point. The question came up under the provisions of the Bankruptcy Law where the term used was "residing." A person living on the other side of Circular Road applied for the benefit of the Act, and the High Court held that carrying on business in Calcutta was sufficient residence to bring him within that section. And yet an amendment was thrown out the other day which provided that a person who carried on business in the town would be entitled to vote. It seems to me only right and proper not to deprive these persons of their right to vote.

The HON. THE ADVOCATE GENERAL said:—The meaning of the expression "carrying on business," according to all the decisions, is that the person should have his place of business and pay rates. Section 8 allows him to do that and it comes within the rule. But I never heard that a man is held to be resident in a place if he has not a place in respect of which he pays rates and taxes. The meaning of the term "resident" in section 8 is that they should be bodily or generally resident, and section 9 provides that "a person qualified under clause (d) shall vote in the ward in which his place of business is situated, otherwise in the place in which he resides." But we are now asked to introduce a third condition of voting, viz, that a person who has no place of business for which he pays taxes, but has an ambulatory business and is not resident in the town, should still be entitled to vote. With regard to what fell from my hon. friend Babu Kali Nath Mitter, I find it stated in Maxwell on Statutes that "in general a place of business will not be regarded as the place of voting."

The HON. SIR HENRY HARRISON said:—If this amendment is carried, the elections might be swamped even by clerks who come daily into town for the purpose of attending the public office in Ward No 12. The object of this section has been correctly stated by my hon. friend Babu Kali Nath Mitter, that the residents of Ward No. 12 may be able to elect the members of Ward No. 12. It is one of the wealthiest wards in the town. Wards 12 and 5 pay on the whole the largest amount of taxation. Ward No. 12, in which this Council Chamber is situated, is the ward in which the business of European firms is carried on more than in any other part of the town; therefore it is the part of the town in which European business ought to find its representatives. But owing to the way in which the section was worded before, the High Court being also situated in this

ward, representation was given not only to those who live in the ward or have large business houses and pay rates in it, but also to the barristers, attornies, and vakeels of the High Court, because they take out licenses of Rs. 50 annually and practice their profession in the Small Cause Court or the High Court. It will be quite sufficient to indicate the necessity of this section if I say that in the four elections since 1876, nine out of the twelve members elected in this the chief business ward of the town have been pleaders or attornies. I hardly think it necessary to put the facts stronger than to say that the residents of the ward could not do more than secure one member against the vote of the legal element. If it is in the new Corporation the wish of the Council that Ward No 12 should be represented by one legal member and one resident member, then this amendment ought to be passed; but if they think that the residents of the ward have a right to elect their own representatives, then I think the section as it stands is perfectly correct.

The motion was put to the vote and negatived.

The HON. MR. IRVING said:—I have the honour to move that for section 18, the following be substituted:—

“Whenever an equal number of votes is given to two or more candidates at any election under this Act, the candidate for whom the greatest number of rate-payers have voted shall be held to be elected; and in case of an equality of votes in this respect, the Chairman shall give a casting vote, and the candidate to whom such vote is given shall be held to be elected.”

It will, I think, be admitted that it is desirable to relieve the Chairman as far as possible from the often invidious and unpleasant task of giving a casting vote in order to decide the election of a candidate. The custom of England is, I understand, to elect the candidate for whom the greatest number of rate-payers have voted in case of an absolute equality of votes. In the highly improbable contingency of a dead-heat also occurring in the number of rate-payers voting for two candidates, the Chairman might then be called upon to give his casting vote.

The HON. SIR HENRY HARRISON said:—I am willing to accept this amendment, but its importance is not great, because the Chairman of the Corporation has never yet had to give a casting vote. In France, when such a case occurs, the elder of the candidates is selected; in Bombay they cast lots. I understand the meaning of the amendment to be this, that if each candidate has 1,500 votes, then if in the one case 700 voters make up the 1,500 votes, and there were 600 voters on the other side, then the candidate for whom the greater number of persons voted would be declared to be elected. If that is the meaning I have no objection.

The HON. DR. GOOROO DAS BANERJEE supported the amendment on the ground that it would in theory at least be a good corrective of the scheme of plural votes.

The HON. MR. REYNOLDS said:—In the event of such a contingency happening, will there be any difficulty in ascertaining which candidate has the greatest number of supporters? In the case of there being 1,500 votes on each side, will there be any difficulty in ascertaining that 700 rate-payers voted for one candidate, and only 600 for the other?

The HON. SIR HENRY HARRISON said:—That can easily be ascertained from the returns. I am glad to see that the objection to the plural vote has dwindled down to such a small compass that the objections to it would be corrected by so comparatively trifling an amendment as this.

The motion was put to the vote and carried.

The Council was adjourned to Saturday, the 18th February 1888.

GORDON LEITH,

*Offg. Asst. Secy. to the Govt. of Bengal,
Legislative Department.*

CALCUTTA;
The 21st February, 1888. }

ILLUSTRATION OF REPORTS BY MAPS.

REVENUE DEPARTMENT—MISCELLANEOUS.

Calcutta, the 8th February 1888.

RESOLUTION.*

READ—

A circular issued by the Government of India, Revenue and Agricultural Department, No. 64G, dated the 2nd November, 1882, containing a proposal to insert maps in administration and other reports to illustrate the questions discussed therein.

Read also—

Letter from the Government of India, Home Department, No. 22—749, dated the 26th May, 1883, with enclosure.

Resolution, dated the 10th June, 1884, issued by this Government to the Board of Revenue, Lower Provinces, and the Heads of Departments, calling upon them to consider how skeleton maps could best be utilised to show, by shades of colour or in other ways, such administrative features as might in their opinion be conveniently illustrated by means of maps.

Letter from the Sanitary Commissioner, Bengal, No. 3447R—A, dated the 28th June, 1884.

Letter from the Protector of Emigrants, No. 1925, dated the 6th December, 1882.

Letter from the Director of Public Instruction, Bengal, No. 5582, dated the 20th July, 1884.

Letter from the Director of the Department of Land Records and Agriculture, dated the 29th August, 1887.

Letter from the Board of Revenue, Lower Provinces, No. 361B, dated the 3rd May, 1887.

Letter from the Board of Revenue, Lower Provinces, No. 449A, dated the 28th June, 1887.

As far back as in 1882 the Government of India, in their Circular of the 2nd November of that year, quoted in the preamble, suggested the more general use in Administration Reports of illustrative maps corresponding in size with the pages of the reports themselves. The Survey Department, it was ascertained, were prepared to supply skeleton maps of the kind required, and the Board of Revenue and the Heads of Departments in these Provinces were requested to consider what features of the administration dealt with by them could best be indicated in the manner proposed.

2. The Lieutenant-Governor considers that the object in view is a desirable one, and has determined to give immediate effect to the suggestion made by the Government of India. The replies of the Officers and Departments consulted are generally in favour of the proposal, but it has been urged by the Board of Revenue that it is calculated to occasion delay in the submission of reports and to entail considerable expense. With regard to the anticipated delay, the Lieutenant-Governor, however, is of opinion that, if the preparation of the maps be taken in hand with forethought, not when the reports which they concern are complete, but as soon as the statistics which they are designed to illustrate have been compiled, there will be no difficulty in submitting them in proper time, and it must be clearly understood that the dates hitherto prescribed for the submission of reports must continue to be adhered to. It may on occasion be found necessary to despatch the maps at a later period to be bound up with the reports, but this procedure should be entirely exceptional, and is to be avoided. In the matter of expense it must also be distinctly understood that no addition can be made to existing departmental grants on this account, and that whatever is done must be done within the limits of budget provision.

3. Sir Stuart Bayley does not desire to indicate once for all any stereotyped plan on which maps should be prepared, but must leave it to the Heads of Departments themselves freely to use their discretion in the matter, so as to illustrate by this means the special features of the particular branch of administration treated during the year under report. The person writing a report will generally be the best judge of the question what statistical information

* To be substituted for the Resolution published at pages 303—304 of the Supplement to the *Calcutta Gazette* of the 15th February 1888.

can on each occasion be embodied in maps with the greatest advantage. It may be observed that the Sanitary Commissioner proposes to indicate, by shades of colour or other appropriate devices, the extent to which operations have been carried on in different localities, the progress of disease, the intensity or persistency with which it has prevailed, the local circumstances which have influenced its prevalence and procedure, its effect on the population, and other cognate matters; while the Director of Public Instruction desires to show the general spread of education as tested by the proportion of scholars to population, the spread of secondary and higher education on the same principle, the spread of secondary and higher education among Muhammadans, and the spread of female education. These suggestions are cited as illustrations of the principle on which the maps should be prepared.

4. For the purposes above set forth, it is thought that maps of the Province on a scale of 80 miles to the inch, or of 64 miles to the inch, are quite sufficient. Either of these scales should be adopted, and it is desirable that one or other of them should be used in preference to any larger scale which would involve the folding up of, and less ready reference to, the maps. In certain cases it may not be practicable to show what is aimed at with distinctness except on a larger scale, but ordinarily the 80-mile or 64-mile scale should suffice, and no map of these Provinces on a larger than the 32-mile scale should accompany the annual report of any Department.

5. The Board of Revenue and the Heads of all Departments will be authorized to indent direct on the Survey Department for their requirements, and the latter will be requested to make arrangements to supply such indents as speedily as possible.

ORDER.—Ordered that the Resolution be published in the *Calcutta Gazette*, and that copies, with copies of the correspondence annexed, be forwarded to the Board of Revenue, Lower Provinces, and the Heads of Departments for information and guidance, and to the Surveyor-General for information.

Ordered also that a copy be forwarded to the Government of India, in the Home, and Revenue and Agricultural Departments, for information, with reference to the Circular from the latter Department No. 64G, dated the 2nd November 1882.

By order of the Lieutenant-Governor of Bengal,

P. NOLAN,

Secretary to the Government of Bengal.

Rainfall, Weather, and State and Prospects of the Crops.

Statement showing Rainfall, Weather, and State and Prospects of the crops in the different districts of Bengal, as reported to Government during the week ending the 18th February 1888

No	District and date of return	Rainfall at Sudder Station in inches	Character of the weather and state and prospects of the crops
BENGAL.			
<i>Western Districts.</i>			
BURDWAN DIV.	1 Burdwan, Feb 18, '88	Nil	Weather—getting warm. <i>Rubbi</i> fair Rice sold at 21 seers per rupee
	Culna	1 05	
	Cutwa	Nil	
	Raneegunge	0 41	
	2 Bankoora „ 18, '88	Nil	Weather—seasonable Mustard, pulses and sugarcane are being gathered Wheat, barley and cotton are thriving Prices continue stationary
BURDWAN DIV.	3 Beerbhoom „ 18, '88	Nil	Weather—seasonable State and prospects of crops good Price of rice slightly higher
	4 Midnapur „ 18, '88	2 87	Weather—seasonable. Prospects good except in the west of district, where <i>rubbi</i> crops are very poor
	5 Hooghly „ 18, '88	Nil	Weather—unsettled Ploughing in full swing Recent rain has benefited all standing crops except potatoes, and has on the whole done much good
	Serampur	1 38	
	Jehanabad	1 05	
BURDWAN DIV.	Howrah „ 20, '88	Nil	Bright sun with cool mornings and evenings <i>Boro dhan</i> has been sown in places. Cutting of sugarcane continues. <i>Rubbi</i> crops are being harvested Prospects satisfactory
	Oolooberia	0 12	
<i>Central Districts.</i>			
PRESIDENCY DIV.	6 24-Pergha Feb 21, '88	0 03	Weather—seasonable, getting warmer daily Harvesting of <i>amun</i> rice over outturn satisfactory Manufacture of sugar continues Prospects of cold-weather crops favourable
	7 Nuddea „ 18, '88	Nil	Weather—seasonable, but foggy cloudy and rainy at times Wheat, barley gram and other <i>rubbi</i> crops generally doing well
	Kushtea	0 78	
	Maharpur	0 17	
	Chooadanga	0 72	
PRESIDENCY DIV.	8 Ranaghat „ 18, '88	0 54	
	Khoolna	0 50	Weather—first part of the week cloudy, latter part clear and seasonable Harvesting of <i>amun</i> nearly finished and transplantation of <i>boro</i> over Winter crops doing well.
	9 Jessore „ 18, '88	Nil	Weather—getting warm <i>Amun</i> harvesting over Lands are being cultivated for early crops. Standing crops doing well
	Jhenidah	0 55	
	Magnalia	0 18	
PRESIDENCY DIV.	Narail	0 79	
	Bongong	1 24	
	10 Moorsheadabad „ 18, '88	0 49	Weather—seasonable <i>Rubbi</i> crops doing well
	Jungipur	0 24	
RAJSHAHY DIV.	11 Dinagepur Feb. 18, '88	Nil	Weather—seasonable. Harvesting of winter rice over Prospects of <i>rubbi</i> and other crops continue satisfactory Price of rice remains stationary
	12 Rajshahye „ 18, '88	Nil	Days warm and nights cool Rain has done much good to standing crops Prospect of <i>ganja</i> good, but rain has done some injury to it
	Nattore	1 80	
	Nowgong	0 50	
	13 Rungpur „ 18, '88	0 09	Weather—getting warm. Prospects of winter crops good
RAJSHAHY DIV.	Gaibanda	0 20	
	Kurigram	0 05	
	14 Bogra „ 18, '88	Nil	Weather—seasonable State and prospects of crops continue satisfactory
	15 Pubna „ 18, '88	0 75	Weather—cloudy and cool Rain has done good to the crops Prospects good
	Seraigunge	1 82	
RAJSHAHY DIV.	16 Darjeeling	...	Report not received
	17 Julpigoree Feb. 18, '88	Nil	Weather—cold with strong westerly wind Standing crops doing well Ploughing for <i>betri</i> paddy going on Prices stationary
<i>Eastern Districts.</i>			
DACCA DIVISION.	18 Dacca, Feb. 18, '88	1 20	Weather—mostly cloudy and cold Recent rain has done much good to the standing crops Ploughing of land for early rice is being pushed on Condition of agricultural stock good
	Munshigunge	1 79	
	Narainigunge	2 18	
	19 Farroedpur „ 18, '88	0 77	Weather—cloudy, a copious shower on 14th Prospects of standing crops good Ploughing continues
	Goalundo	0 72	
DACCA DIVISION.	20 Madanipur	0 28	
	Backergunge „ 17, '88	0 34	Weather—seasonable. Prospect of crops good
	21 Mymensingh „ 17, '88	0 61	Weather—seasonable. State and prospects of crops continue satisfactory
	Jamalpur	0 35	
	Attia	1 28	
CHITTAGONG DIV.	Netrokona	0 64	
	22 Chittagong Feb. 21, '88	0 40	Weather—seasonable. Prospects of standing crops fair Price steady
	23 Meakbolly „ 17, '88	0 36	Weather—unsteady; rather warm, cloudy at times <i>Rubbi</i> crops doing well
	Peni	0 34	Ploughing for <i>aus</i> has commenced
	24 Tipperah „ 16, '88	1 15	Weather—cloudy Agricultural prospects have benefited much by rain Standing crops doing well. Ploughing for <i>aus</i> paddy and jute processing
CHITTAGONG DIV.	Brahmanbariah	0 81	
	Chandpur	1 20	
	Chittagong Hill „ 14, '88	0 45	Weather—cloudy on the 12th and 13th <i>Jum</i> cutting commenced Tobacco, chillies and other crops on the ground doing well. Sugarcane is being pressed.
	25 Thaketa	...	
	Hill Tipperah „ 15, '88	1 05	Weather—cloudy. Sugarcane is still being cut. Prospects of tobacco and chillies fair.

No	District and date of return.	Rainfall at Sudder Station in inches.	Character of the weather and state and prospects of the crops.
BEHAR.			
PATNA DIV.	26 Patna Feb. 18, '88	Nil	Weather—cloudy in the first part of the week; latterly cool and clear. Prospects of <i>rubbi</i> and poppy continue favourable. Collection of opium has begun in some places. <i>Ahar</i> doing well. Prices of food-grains stationary.
	27 Gya „ 18, '88	Nil	Weather—seasonable. <i>Rubbi</i> is progressing tolerably well and is nearly ready. Opium is being extracted.
	28 Shahabad „ 17, '88	Nil	Weather—seasonable. Prospects of <i>rubbi</i> continue good; harvesting of the crop has commenced in places. State of poppy is excellent. Opium is being collected in many places and yield is good.
	29 Durbhunga „ 18, '88	Nil	West wind prevailing. Prospects of <i>rubbi</i> continue favourable. Mustard and tobacco are being harvested. Poppy in blossom. Prices remain stationary.
	30 Mozufferpur „ 18, '88	Nil	Weather—clear with strong west wind. Prospects of <i>rubbi</i> and poppy favourable. Tobacco and mustard are being harvested.
	31 Saran „ 18, '88	Nil	Weather—seasonable. Prospects of <i>rubbi</i> and poppy continue good.
	32 Chumparun „ 18, '88	Nil	Weather—fair and cool; west wind prevails generally. <i>Rubbi</i> crop is generally in ear and doing well; it is, however, short in some parts of the district. Extraction of opium has commenced on a small scale; much of the crop is in blossom with fair prospects. Fields are being prepared for <i>aghar</i> sowing in the Bettiah sub-division.
BRAGULPORE DIV.	33 Monghyr Janm. Feb. 18, '88	Nil 0.9	Weather—seasonable; cloudy at times. Prospects of <i>rubbi</i> crops continue good though cloudy weather has somewhat affected them generally. Collection of opium has begun in places.
	34 Bhagulpur „ 18, '88	Nil	Weather—occasionally cloudy with west wind; getting warm during the day. Prospects of standing crops fair. Deficient rainfall is likely to affect the outturn of <i>rubbi</i> , of which a 10-anna harvest may be estimated.
	35 Purneah „ 18, '88	0.06	Weather—seasonable; westerly wind prevails. Tobacco and mustard crops have given a good outturn. <i>Rubbi</i> crops doing well.
	36 Maldah Chanchal „ 18, '88	Nil 0.16	Weather—fine; occasionally cloudy. Gathering of <i>kalai</i> and mustard almost over. Prospects of other standing crops continue favourable. Planting of <i>boro</i> paddy going on. Common rice selling at an average of 23½ seers per rupee.
	37 Sonthal Pergas. „ 18, '88	Nil	Weather—getting warm. Prospects of <i>rubbi</i> crops continue fair. Sugarcane is being pressed; outturn good. Prices of food-grains stationary.
	Godda „ „	0.10	
	Jamtara „ „	0.56	
	Rajmahal „ „	0.07	
	Pakour „ „	0.08	
ORISSA.			
ORISSA DIV.	38 Cuttack Feb. 17, '88	0.62	Weather—fair. <i>Sarad</i> is being threshed. <i>Dalua</i> rice growing well. Price of common rice unchanged.
	39 Pooree „ 16, '88	Nil	Weather—seasonable. Land is being ploughed. <i>Dalua</i> crop doing well. Prices stationary.
	40 Balasore „ 17, '88	2.90	Weather—cool and pleasant. Cold-weather crops being reaped, and lands cultivated for sugarcane and rice. Recent rain has probably been very beneficial.
CHOTA NAGPORE.			
<i>South-West Frontier Agency.</i>			
CHOTA NAGPORE DIV.	41 Hazaribagh, Feb. 17, '88	Nil	Weather—cloudy at times. Flowering of mango and <i>mohua</i> retarded by cloudy weather. Lancing of poppy in progress. Blight has appeared in places, no serious consequences apprehended. Ground being prepared for hot-weather crops. Prices stationary, but high.
	42 Lohardugga „ 18, '88	Nil	Weather—getting warm. Prospect of <i>rubbi</i> continues favourable. Prices of food grains easy.
	43 Singbhum „ 17, '88	0.34 0.27	Weather—bright and seasonable. Light rain fell during the week. Cotton and <i>rubbi</i> crops doing well. Ground is being ploughed for next sowings.
	44 Manbhum „ „		Report not received.

Published for general information.

CALCUTTA, REVENUE DEPT.;
The 21st February 1888.P. NOLAN,
Secy. to the Govt. of Bengal.

**PRICES-CURRENT (*RETAIL*) OF FOOD-GRAINS, FIREWOOD AND SALT IN THE
HEAD-QUARTER STATION BAZARS OF THE DISTRICTS OF BENGAL
DURING THE FOETNIGHT ENDING THE
15TH FEBRUARY 1888.**

PRICES-CURRENT (retail) of Food-grains, Firewood and Salt in the

Number.	DISTRICTS.	QUANTITIES PER RUPEE IN														
		WHEAT.			BARLEY.			RICE, BEST SORT.			RICE, COMMON.			JOWAR OR CHOLUM (Sorghum Vulgare.)		
		Present return.	Next preceding return.	Corresponding return of last year.	Present return.	Next preceding return.	Corresponding return of last year.	Present return.	Next preceding return.	Corresponding return of last year.	Present return.	Next preceding return.	Corresponding return of last year.	Present return.	Next preceding return.	Corresponding return of last year.
BENGAL.																
Western Districts.																
		S. Ch.	S. Ch.	S. Ch.	S. Ch.	S. Ch.	S. Ch.	S. Ch.	S. Ch.	S. Ch.	S. Ch.	S. Ch.	S. Ch.	S. Ch.	S. Ch.	S. Ch.
1	Burdwan	12 8	15 0	12 0			No sale.	18 12	15 0	20 8	22 8	22 8	26 10	...	...	...
2	Bankura	13 8	13 0	13 12	18 0	18 0	24 0	19 8	18 8	18 12	21 0	19 3½	18 0	...	...	...
3	Peerbhoom	13 8	15 0	18 0	...	...	...	15 12	15 12	22 8	21 0	21 0	24 0	...	...	...
4	Midnapore	15 0	15 0	14 0	...	...	...	22 0	18 0	17 0	23 0	22 0	26 0	...	...	...
5	Hooghly	14 0	14 0	14 0	...	...	...	0 0	10 0	10 0	16 0	16 0	17 0	...	...	...
	Howrah	Not available.			...	...	...	14 0	13 12	13 0	20 0	19 8	17 8	...	...	...
Central Districts.																
		S. Ch.	S. Ch.	S. Ch.	S. Ch.	S. Ch.	S. Ch.	S. Ch.	S. Ch.	S. Ch.	S. Ch.	S. Ch.	S. Ch.	S. Ch.	S. Ch.	S. Ch.
	Calcutta	13 0	13 1	13 0	21 3	22 13	19 4	10 2	10 7	9 7	16 9	16 13	19 4	15 3	15 2	19 0
6	24-Pergunnahs	16 0	16 0	14 4	22 8	22 8	20 0	8 0	8 0	8 0	13 0	18 4	18 13	21 4	...	...
7	Nuddea	16 0	16 0	16 0	32 0	32 0	32 0	14 8	14 8	17 12	19 4	18 3	19 4	...	...	...
8	Khoolna	...	...	...	...	...	...	18 0	18 0	18 0	21 8	21 8	21 0	...	...	...
9	Jessore	13 4	13 4	16 0	...	...	...	18 0	18 0	14 0	22 12	22 0	21 8	...	...	...
10	Moorshedabad	13 5	16 0	17 0	...	...	...	16 0	16 0	20 0	22 0	22 0	24 0	...	...	...
11	Dinagore	13 8	15 4	12 0	21 0	22 8	22 0	19 5	19 0	21 8	24 4	25 0	27 8	...	...	...
12	Raishahye	16 8	17 4	18 0	45 0	45 0	41 4	16 8	16 8	17 4	21 6	21 0	21 0	...	...	...
13	Rungpore	13 4	14 8	12 12	...	...	...	13 4	14 4	18 0	20 0	22 12	22 8	...	...	...
14	Bogra	17 4	16 8	17 4	...	...	...	15 0	15 0	15 0	26 4	26 4	28 4	...	...	...
15	Pubna	18 0	19 8	21 0	...	...	...	8 0	8 4	8 0	22 8	22 8	24 0	...	...	...
16	Darjeeling	10 0	10 0	9 0	11 0	11 0	9 0	5 0	5 0	5 0	12 0	12 0	14 0	...	...	...
17	Julpigoree	13 0	13 4	10 0	20 0	20 0	20 0	13 5	12 0	14 0	20 0	20 0	26 0	...	...	...
Eastern Districts.																
18	Dacca	16 0	16 0	16 0	26 0	26 0	26 0	19 0	18 0	17 0	22 0	21 0	19 0	...	...	...
19	Furzedpore	18 0	18 0	17 0	40 0	40 0	25 0	16 0	16 0	18 0	28 0	20 0	21 0	...	...	...
20	Backergunge	...	...	...	...	...	...	15 0	15 4	15 8	21 0	21 0	17 8	...	...	...
21	Mymensingh	11 0	12 0	12 0	...	...	...	12 0	12 0	10 8	18 8	18 8	17 0	...	...	...

A In sub-divisions retail prices of salt per rupee were:—Culina 10½ seers, Kanchengunge 1½ seers.

B In sub-divisions retail prices of salt per rupee were:—Tumlook 11 seers, Ghattal 12 seers.

C At Jehanabad retail price of salt 11 seers per rupee.

C1 In sub-divisions retail prices of salt per rupee were:—Baraset 12 seers, Bussirhat 13 seers, Diamond Harbour (Kulpihat) 9 seers, Barrackpore 10½ seers and Dum-Dum 12 seers.

D In sub-divisions retail prices of salt per rupee were:—Koothea 10 seers, Meherpore 11 seers, Choondanga 10½ seers, and Ranaghat 10½ seers.

E In sub-divisions retail prices of salt per rupee were:—Satkhiria 9 seers 1½ chittacs and Bagirhat 8 seers.

F In sub-divisions retail prices of salt per rupee were:—Jhenidah and Magura 9 seers, Arail 7½ seers, and Bangong 9 seers.

BAJRA OR CUMBU. <i>Pennisetum typho- ideum.</i>)	MARUA OR RAGI. (<i>Elousine Corocana.</i>)
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Present return	
Next preceding return.	
Corresponding return of last year	
Present return.	
Next preceding return	
Corresponding return of last year.	

S. Ch.	S. Ch.	S. Ch.	S. Ch.	S. Ch.	S. Ch.
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1	6	11	9	18	8	11	9	11	1		...
	
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KANGNI OR KAKUN. ITALIAN MILLET. (<i>Setaria italica</i> .)			GRAM, CHANA, CHHOLA, KADALAY, OR SUNAGA. (<i>Cicer arisctinum</i>)		
Present return.	Next preceding return.	Corresponding return of last year.	Present return.	Next preceding return	Corresponding return of last year.

S. Ch.	S. Ch.	S. Ch.	S. Ch.	S. Ch.	S. Ch.
..	20 0	19 0	21 0
...	16 0	17 8	19 4
...	20 0	21 0	20 0
...	19 0	18 0	18 0
..	19 0	20 0	19 0
...	20 0	20 0	20 0

12 4	12 3	17 12	18 13	19 5	19 2
13 5	13 4	...	21 4	22 8	22 8
..	..	...	22 14	22 14	22 14
...	...	..	16 0	16 0	16 0
...	...	...	20 0	21 0	22 8
...	...	...	23 0	22 8	29 6
...	...	...	15 12	17 4	21 0
...	...	...	19 8	20 4	21 0
...	...	...	21 0	21 0	15 0
...	..	...	12 0	12 0	15 0
...	...	...	24 0	26 4	22 8
...	...	...	11 0	12 0	11 0
...	...	...	18 0	20 0	16 0
...	...	...	18 0	18 0	18 0
...	...	...	16 0	16 0	20 0
...	...	...	13 0	13 0	16 0
...	...	...	18 4	18 8	18 0

Head-quarter station Bazars of the Districts of Bengal on the 15th February 1888.

															WHOLESALE PRICES PER MAUND OF 4 SEERS.			DISTRICTS.
INDIAN-CORN OR MAIZE. (Zea Mays.)			ARHAR OR THUR CAJAN PEA. (Cajanus indicus.)			FIREWOOD			SALT.			SALT.						
Present return.	Next preceding return.	Corresponding return of last year.	Present return.	Next preceding return.	Corresponding return of last year.	Present return.	Next preceding return.	Corresponding return of last year.	Present return.	Next preceding return.	Corresponding return of last year.	Present return.	Next preceding return.	Corresponding return of last year.				
BENGAL.																		
Western Districts.																		
S. Ch.	S. Ch.	S. Ch.	S. Ch.	S. Ch.	S. Ch.	S. Ch.	S. Ch.	S. Ch.	S. Ch.	S. Ch.	S. Ch.	S. Ch.	S. Ch.	S. Ch.	Rs. A. P.	Rs. A. P.	Rs. A. P.	
No sale.			23 0	23 4	25 0	120 0	120 0	120 0	A 11 2	11 7	13 4	3 8 0	3 8 0	2 15 9	Burdwan.			
34 0	35 0	40 0	20 0	20 0	22 0	320 0	320 0	280 0	11 0	11 0	12 8	3 9 0	3 8 0	3 3 0	Bankoors.			
...	...	...	15 0	13 8	13 8	160 0	160 0	160 0	10 0	10 0	12 0	3 8 0	3 8 0	3 2 0	Beerbhoom.		
...	...	...	13 0	13 0	16 0	120 0	120 0	155 0	B 13 0	13 0	12 0	3 0 0	3 0 0	3 1 2	Midnapore.		
...	...	...	13 0	13 0	15 0	120 0	120 0	120 0	C 10 8	10 8	13 0	...	...	3 0 6	Hooghly.		
...	...	...	12 8	13 0	14 0	100 0	100 0	90 0	10 11	10 10	12 0	3 8 0	3 7 0	3 2 0	Howrah.		
Central Districts.																		
22 8	23 14	24 8	19 1	18 11	17 0	92 10	85 0	70 0	11 0	11 9	13 0	3 5 0	3 1 9	3 0 0	Calcutta.			
...	22 8	23 0	21 4	20 0	19 0	100 0	100 0	90 0	C1 10 8	11 0	12 8	3 7 0	3 7 0	3 0 0	S. Pargunnah.			
...	...	...	21 10	21 10	20 0	...	...	...	D 9 2	9 2	11 10	3 11 0	3 12 0	3 0 0	Nuddea.		
...	...	...	...	...	...	160 0	160 0	160 0	E 9 0	9 0	10 8	3 12 0	3 12 0	3 12 0	Khoolna.		
...	...	...	22 0	30 6	26 0	100 0	100 0	11 0	F 9 4	9 2	10 12	3 12 0	3 12 0	3 4 0	Jessore.		
...	...	40 0	23 0	20 0	21 0	200 0	180 0	160 0	G 10 0	10 8	12 0	...	3 12 0	3 5 0	Moussammat.			
...	...	...	16 0	16 0	...	180 0	180 0	160 0	H 10 0	10 0	12 0	3 12 0	...	3 4 0	Dumagore.		
...	...	...	16 2	16 12	16 0	240 0	240 0	240 0	I 9 9	9 9	12 0	3 13 4	3 13 4	3 2 0	Rajshahy.		
...	...	...	10 0	10 0	10 10	120 0	120 0	120 0	J 10 0	10 12	10 8	3 14 0	3 12 0	3 6 0	Rangpore.		
...	...	...	...	...	...	20 0	90 0	90 0	8 1	9 12	10 8	4 5 4	3 10 8	3 5 4	Bogra.		
...	...	...	27 0	19 12	24 0	200 0	200 0	200 0	K 10 0	10 0	12 0	...	...	3 5 3	Pabna.		
26 0	26 0	23 0	8 0	8 0	8 0	120 0	120 0	120 0	9 0	9 0	9 0	4 4 0	4 4 0	4 4 0	Darjeeling.			
20 0	20 0	16 0	9 0	11 0	12 0	128 0	128 0	128 0	L 9 0	9 0	11 0	4 0 0	4 0 0	3 6 0	Jalpigore.			
Eastern Districts.																		
...	...	...	18 8	18 8	...	120 0	120 0	120 0	M 10 10	12 8	6 8	3 12 0	3 3 0	3 8 0	Dacca.		
...	...	...	...	13 0	14 0	16 0	16 0	120 0	12 0	12 0	11 0	3 1 0	3 1 0	3 5 0	Faroukpoore.		
...	...	...	10 0	10 10	13 0	120 0	120 0	120 0	N 9 0	9 0	11 8	3 10 0	3 10 0	3 6 0	Backergunge.		
...	...	...	...	16 0	...	...	...	...	O 10 0	0 8	11 12	3 14 0	3 10 0	3 6 0	Mymensingh.		

- G In sub-divisions retail prices of salt per rupee were:—Lalbagh 11 seers, Jungipore 10½ seers and Kandi 12½ seers.
H At Tnakurgaon retail price of salt 8 seers per rupee.
I In sub-divisions retail prices of salt per rupee were:—Natore 9½ seers and Nowgong 8 seers.
J In sub-divisions retail prices of salt per rupee were:—Kurigram 9½ seers, Gaibanda 7 seers, Nilphamari 11 seers.
K At Serajunge retail price of salt 11 seers per rupee.
L At Fallacotta retail price of salt 8 seers per rupee.
M In sub-divisions retail prices of salt per rupee were:—Manickgunge 8 seers, Moonsheegunge 10½ seers.
N In sub-divisions retail prices of salt per rupee were:—Fazlkaul 9½ seers, Faroukpoore 9 seers.
O In sub-divisions retail prices of salt per rupee were:—Kishoregunge 6 seers, Attea 10 seers, Jamalpoore 8½ seers, Sarpore 10 seers and Netrokona 10½ seers.

PRICES-CURRENT (retail) of Food-grains, Firewood and Salt in the Head-quarter

Number.	DISTRICTS	QUANTITIES PER RUPEE IN																	
		WHEAT			BARLEY			RICE, BEST SORT			RICE, COMMON.			LOWAR OR CHOLUK (<i>Sorghum Vulgare</i>)					
		Present return.	Next preceding return	Corresponding return of last year.	Present return.	Next preceding return	Corresponding return of last year.	Present return	Next preceding return	Corresponding return of last year.	Present return.	Next preceding return	Corresponding return of last year.	Present return.	Next preceding return	Corresponding return of last year.	Present return.	Next preceding return	Corresponding return of last year.
Eastern Districts—continued																			
22	Chittagong	11 0	10 15	16 0				12 8	15 0	13 0	10 6	18 15	19 8						
23	Nakholly ..							20 0	20 0	21 0	22 0	22 0	21 0						
24	Tipperah	13 8	13 8	11 6				17 8	17 8	17 6	25 0	26 4	19 0						
25	Chittagong Hill Tracts							14 8	14 8	12 4	16 0	16 0	14 14						
	Hill Tipperah	8 0	12 0	12 0				16 0	16 0	16 0	26 0	27 0	21 0						
BEHAR.																			
26	Patna	16 0	17 0	18 0	29 0	31 0	34 0	11 8	11 8	11 8	20 0	22 0	23 0	20 0	26 0	26 0			
27	Gia	13 0	13 4	15 0	26 0	21 0	24 0	10 0	10 0	12 0	18 0	17 8	20 0						
28	Shahabad	13 8	12 12	14 0	22 8	21 0	28 0	11 8	12 8	9 0	17 0	17 8	21 0	23 0	22 0				
29	Durbhanga.*																		
30	Monsieffore	12 0	13 0	17 0	30 0	30 0	30 0	12 0	12 0	11 0	19 0	20 0	22 0						
31	Baran	13 8	14 8	15 0	25 8	21 8	31 0	8 8	8 8	9 0	20 8	19 8	21 0						
32	Clumpanu	13 0	13 0	21 0	30 0	32 0	40 0	13 0	12 0	7 8	21 0	19 0	20 0						
33	Monghyr	15 12	16 13	14 12	27 4	25 4	33 9	13 14	13 11	14 12	18 4	17 13	19 6						
34	Bhagulpore	13 14	15 2	16 6	5 4	25 4	25 5	16 6	16 6	17 10	20 3	18 15	21 7						
35	Purneah	18 0	19 0	20 0	32 0	40 0		20 0	20 0	20 0	22 0	21 0	22 0						
36	Maldah	18 0	18 0	13 0				13 0	12 0	18 0	22 0	22 0	24 0						
37	Sonthal Perga	11 4	12 0	13 0				15 0	16 0	16 0	22 0	22 0	25 0						
ODISHA.																			
38	Cuttack	15 12	15 12	9 8				10 8	13 2	11 13	21 0	19 11	21 0						
39	Pooree	14 7	14 7	9 8				15 12	15 12	17 1	23 10	23 10	23 10						
40	Balasore	13 0	15 0	15 0	13 0	13 0	13 0	15 0	15 0	13 0	24 0	24 0	14 0						
CHOTA NAGPORE																			
Santa-Western Frontier Agency																			
41	Hasarobagh ..	12 0	10 0	17 0	18 0	20 0	20 0	9 0	9 8	11 0	16 0	16 0	21 0						
42	Lohardugga ..	12 0	12 0	18 0			18 0	16 8	16 8	19 0	21 0	19 0	24 0						
43	Singbhoom	11 0	12 0	24 0	20 0	26 0	24 0	14 0	12 0	28 0	22 0	20 0	32 0						
44	Manbloom.*																		

* Returns not received.

P At Fanchgachia retail price of salt 8 seers per rupee.

Q In sub-divisions retail prices of salt per rupee were:—Buxar 10½ seers and Bhabuah 10 seers.

R At Hajpore retail price of salt 10½ seers per rupee.

S At Bettiak retail price of salt 11½ seers per rupee.

T In Begusarai and Jamui sub-divisions retail price of salt 10 seers per rupee.

Published for general information.

CALCUTTA,
The 21st February 1888.

OF 80 TOLARS.

[illegible]

KANGNI OR KAKUN.
ITALIAN MILLET.
(*Setaria italica*)

GRAM, CHANA,
CHHOLA, KADALI
OR SUNAGA
(*Cicer arietinum*)

Present return.	Next preceding return.	Corresponding return of last year.	Present return.	Next preceding return.
-----------------	------------------------	---------------------------------------	-----------------	------------------------

S. Ch.	S. Ch.	S. Ch.	S. Ch.	S. Ch.
...	11 0	14 0
...	13 0	13 0
..	11 0	11 0
...
...	12 0	12 0

30 0	30 0	20 0	20 0	21 0
19 0	19 0	18 0	19 0	22 0
..	...	...	20 0	20 0
...	
...	...	...	19 0	19 0
19 8	19 0	14 0	20 0	20 9
...	...	...	18 0	18 0
21 0	21 0	24 0	23 1	24 1
...	...	...	20 3	20 3
16 0	16 0	...	26 8	26 0
...	...	...	20 0	22 0
...	...	...	20 0	21 0
...	...	...	21 0	(K d 18 1
...	...	...	17 1	(Kale 17
...	...	..	17 0	17
...	...	...	16 0	16
...	...	...	16 0	16
...	...	...	12 0	13
...	

Station Bazars of the Districts of Bengal on the 15th February 1888—(concluded.)

INDIAN CORN OR MAIZE (Zea Mays)			ARHAR OR THUR CADJAN PRA (Cajanus indicus)			FIRKWOOD			SALT			WHOLESALE PRICES PER MAUND OF 40 SEERS			DISTRICTS.
Present return.	Next preceding return.	Corresponding return of last year.	Present return.	Next preceding return.	Corresponding return of last year.	Present return.	Next preceding return.	Corresponding return of last year.	Present return.	Next preceding return.	Corresponding return of last year.	Present return.	Next preceding return.	Corresponding return of last year.	

Eastern Districts—continued.

S	Ch	S	Ch	S	Ch	S	Ch	S	Ch	S	Ch	S	Ch	S	Ch	S	Ch	S	Ch	R	A	P	R	A	P	R	A	P				
				9	0	10	0	10	0	11	0	11	0	7	0	9	0	9	0	13	0	3	13	0	1	3	0		Littlemang			
																P	8	0	9	0	11	0	4	8	0	3	12	0	3	8	0	Naktaly
				8	0	8	0	11	2							10	8	10	8	11	4	3	12	0	3	12	0	3	7	0	Topprah	
										32	0	32	0	32	0	8	0	8	0	8	0	1	8	0	4	8	0	4	8	0	Chitragona Hill	
				12	0	12	0	16	0							2	0	9	0	11	0	1	4	0	1	4	0	1	4	0	Hill Topprah	

Bihar

28	0	30	0	30	0	18	0	24	0	28	0	120	0	120	0	12	0	10	8	11	8	11	8	3	8	0	3	1	6	3	1	8	Purnea				
						20	0	17	0	21	0	140	0	140	0	10	0	10	0	10	0	11	0										3	0	0	Patna	
						13	0	13	0	14	0	160	0	160	0	11	0	10	0	12	0	4	0	0									3	5	0	Shahabad	
																																			Darbhanga		
16	0	26	0	28	0	12	0	14	8	20	0	160	0	160	0	140	0	10	0	10	0	12	0	3	14	0	3	14	0	3	1	0	Muzaffarpore				
24	4	26	0	29	0	16	8	16	12	22	8	160	0	160	0	160	0	10	14	10	12	2	0	3	9	6	3	10	0	3	2	0	Saran				
8	0	29	8	20	12	15	0	14	0	24	8	160	0	160	0	160	0	9	0	9	0	12	0	3	12	0	3	12	0	3	2	0	Chauri				
26	4	27	4	31	8	16	13	16	13	21	0	126	0	126	0	126	0	11	0	10	8	13	10	3	0	0	3	5	0	2	1	0	Monghyr				
25	4	25	4	32	18	16	6	17	10	31	7	161	0	176	12	170	7	10	1	10	13	12	10	3	0	0	3	8	0	3	1	3	Baghpat				
		20	0			16	0	16	0	13	0	120	0	120	0	128	0	9	0	10	0	10	8	4	0	0							3	1	0	Farukh	
												120	0	120	0	160	0	10	0	10	0	12	0											3	0	0	Maitan
29	0	30	0	40	0	24	0	26	0	27	0	200	0	200	0	200	0	10	0	9	0	12	0	3	13	0	1	1	0	3	4	0	South Bengal				

ORISSA.

...	...			19	11	18	6			80	0	80	0	80	0	9	12	9	0	14	0	4	0	0	1	0	0	2	12	0				Patna
...	...			17	1	17	1	15	12	70	0	70	0	70	0	10	8	10	8	14	7	3	8	0	3	8	0	2	10	0				Patna
				10	8	12	0	13	0	20	0	200	0	160	0	9	0	9	0	10	0	4	1		4	2		3	10	0				Patna

CHOTA NAGPUR
South Western & near Agnagar

21	0	20	0	28	0	18	0	18	8	20	0	320	0	320	0	320	0	8	0	8	0	10	0	4	4	0	4	8	0	3	8	0	Hazaribagh
24	0	24	0	25	0	20	0	20	0	20	0	160	0	140	0	120	0	9	12	10	0	10	0	1	2	0							Lonraungga
...	...	...	...	12	0	20	0	24	0	24	0	320	0	240	0	9	0	8	14	9	0	4	8	0	4	8	0	4	8	0	4	0	Singbhoom
...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	Manbhoom

U In sub-divisions retail prices of salt per rupee were:—Banks 12 seers, Mudchpura 11 seers and Soopool 10 seers.
 V At Kishengunge retail price of salt 8 seers per rupee.
 W At Khordah retail price of salt 9 seers per rupee.
 X At Giridi retail price of salt 10 seers per rupee.
 Y At Daitongunge retail price of salt 8 1/2 seers per rupee.

P. NOLAN,
 Secy. to the Govt. of Bengal.

PRICES-CURRENT (wholesale) of Food-grains, Firewood, and Salt in the

N ^o	MARK	WHEAT			BARLEY			RICE, BEST SORT.			RICE, COMMON.		
		Present return	Next preceding return	Corresponding return of last year	Present return	Next preceding return	Corresponding return of last year	Present return	Next preceding return	Corresponding return of last year	Present return	Next preceding return	Corresponding return of last year
		R A P	L A P	L A P	R A P	L A P	L A P	R A P	L A P	L A P	R A P	L A P	R A P
1	Calcutta	2 11 7	2 11 5	3 0 3	1 7 10	1 7 7	1 12 6	3 11 11	3 11 3	3 7 6	2 2 0	2 2 1	1 12 6
2	Serajgunge	2 2 0	2 1 0					3 6 0	3 6 0	3 12 0	1 11 0	1 14 0	1 9 0
3	Dacca	2 6 0	2 6 0	2 6 0	1 0	1 8 0	1 8 0	2 0 0	2 3 0	2 5 0	1 12 0	1 11 0	2 0 0
4	Narainpore												
5	Chittagong	3 8 0	3 11 0	3 6 0				3 0 0	2 10 0	3 0 0	2 0 0	2 2 0	2 0 0
6	Patna	2 7 0	2 7 0	2 4 0	1 0 0	1 4 6	1 2 6	3 0 0	3 0 0	3 0 0	1 11 0	1 12 0	1 11 0
7	Bahar		2 11 0	2 7 0	3 0 0	3 0 0	3 0 0	2 8 0	2 8 0	3 0 0	1 10 0	1 10 0	1 8 0
8	Prose										1 5 0	1 8 0	1 8 0
	Chittagong		2 5 0	1 0				3 10 0	3 0 0	3 4 0	1 11 0	2 0 0	1 11 0

* Return not received

CALCUTTA

The 21st January 1888

10 SEERS.

ARUA OR RAGI. (usine Corocana.)			KANGNI OR KAKUN ITALIAN MILLET. (Setaria italica.)		
Next preceding return.			Present return.		
Corresponding return of last year.			Next preceding return.		
R. A. P.			R. A. P.		
0	3	4 6	...	...	...
...
...
...
...
...	1	6 0	1	4	6 1 4 6 1 14 0
...
...
...

PRICES PER MAUND

JOWAR OR CHOLU. (<i>Sorghum Vulgare</i> .)			BAJRA OR CUMBU. (<i>Pennisetum typhoides</i> .)		
Present return.	Next preceding return.	Corresponding return of last year.	Present return.	Next preceding return.	Corresponding return of last year.
R. A. P.	R. A. P.	R. A. P.	R. A. P.	R. A. P.	R. A. P.
2 4 5	2 4 9	1 11 0	3 4 0	3 2 11	2 4
...
...
...
...
1 14 0	1 6 0	1 6 0	...	...	1 6
...
...
...

undermentioned *Marts* of Bengal on the 15th February 1888.

GRAM, CHANA, CHHOLA, KADALAY OR SUNAGA. (<i>Cicer Arietinum</i> .)			INDIAN-CORN OR MAIZE. (<i>Zea Mays</i> .)			ARHAR OR THUR CABJAN PRA. (<i>Cajanus indicus</i> .)			FIREWOOD.			SALT			MARTS.
Present return.	Next preceding return.	Corresponding return of last year.	Present return.	Next preceding return.	Corresponding return of last year.	Present return.	Next preceding return.	Corresponding return of last year.	Present return.	Next preceding return.	Corresponding return of last year.	Present return.	Next preceding return.	Corresponding return of last year.	
R. A. P.	R. A. P.	R. A. P.	R. A. P.	R. A. P.	R. A. P.	R. A. P.	R. A. P.	R. A. P.	R. A. P.	R. A. P.	R. A. P.	R. A. P.	R. A. P.	R. A. P.	
1 14 2	1 12 10	1 13 0	1 8 9	1 7 6	1 4 0	1 13 8	1 14 1	2 4 0	0 6 9	0 6 9	0 7 0	3 5 0	3 1 9	3 0 0	Calcutta.
2 8 0	2 14 0	1 15 0	...	...	...	...	...	...	...	...	...	3 5 0	3 5 0	3 1 4	Serajung.
2 3 0	2 3 0	2 2 0	...	...	...	2 0 0	2 0 0	...	0 5 0	0 5 0	0 5 0	3 12 0	3 3 0	3 8 0	Dacca.
...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	Narainjung.
3 8 0	2 12 0	2 0 0	...	...	...	4 4 0	3 12 0	3 12 0	0 5 0	0 5 0	0 8 0	3 13 0	4 0 0	3 0 0	Chittagong.
1 14 6	1 13 0	1 5 6	1 7 0	1 4 6	1 4 9	1 14 6	1 11 0	1 5 0	0 5 0	0 5 0	0 5 0	3 8 0	3 1 6	3 1 6	Patna.
2 4 0	2 4 0	2 6 0	...	...	...	3 4 0	3 2 0	3 0 0	0 4 0	0 4 0	0 5 0	4 1 0	1 2 0	3 10 0	Balasore.
...	...	...	...	...	...	...	...	...	...	...	...	3 8 0	3 8 0	2 10 0	Poorce.
1 11 0	(kula)	2 0 0	...	...	...	2 0 0	2 2 0	...	0 8 0	0 8 0	0 8 0	4 0 0	1 0 0	2 12 0	Cuttack.

Published for general information.

P. NOLAN,
Secy to the Govt of Bengal.

The following Statement shows the Quantities of the Principal Staples of Traffic imported into Calcutta from the Interior during the month of November 1887.

IMPORTS INTO CALCUTTA.

Whence imported.	FOOD-GRAINS.							FIBROUS PRODUCTS.		OIL-SEEDS.		Tea, Indian.	Cotton, raw.	Silk, raw.	SUGAR.			Total.
	RICE AND PADDY.			Wheat.	Gram and pulses.	Other food-grains.	Total.	Jute, raw.	Gunny-bags,†	Linseed.	Mustard-seed.				Draimed.	Un-draimed.	Ria path.	
	Rice.	Paddy.	Total (in mds.)															
BENGAL.																		
Bardhaman	1,58,332	7,280	1,65,612	1,715	6,767	47	1,71,411	1,491	11,775	5,729	573			48				
Birbhum	94,042		94,042		3,333		97,375		4,795	274				150				
Midnapore	1,36,401	11,697	1,48,098		928	90	1,48,732		800	2,350	1,189			360				
Hoochly	86,730	3,260	89,990	9,915	5,891	412	1,01,986	83,710	370,655	20,176	7,320			723	22	815	2,305	
24-Pargunnahs	1,78,948	34,499	2,13,447	228	2,297		2,13,699	1,10,689	663,165	10				4,024		10,163	24,020	
Nuddes	7,080	811	7,891	13,350	1,825	2,664	2,05,876	69,989	2,400	12,367	1,179			183	475	365	330	
Khulna	16,735	19,300	36,035		1,520		30,374	85,401						41		775	11,315	
Jessore	32,244	14,805	47,049		22,306		69,355	1,901	3,400	421				42		100	6,020	
Moorsheadabad	9,055		9,055	11,101	31,240	3,007	57,273	1,901	765	8,484	3,358							
Dinapore	3,519		3,519		99	230	3,848	21,558	112,535									
Rajahmundry	2,523		2,523	347	21,460		21,807	66,294	600	2,543	145							
Bungpore	16		16				16	2,25,192	210,135									2,081
Borra	18,184		18,184				18,184	22,646										
Pubna	1,960		1,960		7,898		9,858	5,11,266	650,800	2,503	6,901							402
Darjeeling								80,026	800,355									
Malpore								4,71,707	1,240	1,374				87			43	
Dacca	1,075		1,075	112	7,183		8,320	4,30,889	3,265					66	428		825	370
Furriedpore	12,373	975	13,348	25	1,01,413		1,11,351	8,820										
Backerkunge	1,60,180	1,025	1,61,205		6,479		1,67,684											
Mymensingh	408		408				408	2,22,971										
Tripurah	2,675		2,675		52		2,727	353										
Chittagong														2,073	1,458			
Noakholly	16,725		16,725		2,267		19,722	356										
Total of Bengal	9,39,017	37,703	9,76,720	36,880	1,06,102	7,120	11,47,718	25,07,440	2,829,655	58,342	19,434	33,900	6,632	1,580	12,308	44,942	2,952	6
BEHAR.																		
Patna				10,567	62,632	8,140	1,11,279		1,250	2,25,741	3,403		35	1	237	2,042		
Gaya				9,701			9,701		350	4,171						793		
Munabhad				4,130	5,810	287	10,228	862	210	15,112		6				9,106		
Meerutpore				1,554	1,462		3,016		105	10,077	1,008							
Darbhanga		8		6,973	667	100	7,740		400	12,163	3,451		3		452	277		
Baran				3,543	4,029	470	8,112		315	9,923	3,699		1	6				
Champur				2,416			2,416			31,330	510							
Monohyr	477	20	497	32,071	22,764	219	55,054		980	18,470	2,166	1				167		
Bhawalpore	894		894	44,359	16,654	5,333	66,346		883	16,360	11,315			6				
Purneah	533		533	1,371	8,382	607	10,901	1,467	525	13,381	8,091							
Malda	659		659	8,884	8,383	1,261	19,184	21,728		2,422	590							
Sonthal Pargunnahs.				14,168	21,107		35,275		665	9,236	3,429			63		71		
Total of Behar	2,670	28	2,698	1,60,680	1,51,267	16,617	3,40,162	24,957	5,185	4,51,061	38,194	9	44	70	680	13,356	2	1
ORISSA.																		
Cuttack								4,151										
Balasore	21,418		21,418		108		21,526	5,079	4,700		280							
Total of Orissa	21,418		21,418		108		21,526	9,230	4,700		280							
CHOTA NAGPORE.																		
Hazaribagh					651		651		2,870			314		14				
Manbhum									385									
Total of Chota Nagpore.					651		651		3,255			314		14				
Grand Total of supplies from the Provinces under the Lieutenant-Governor of Bengal.																		
	9,63,095	37,731	10,00,826	2,06,580	1,06,138	27,737	11,47,718	25,07,440	2,842,775	5,10,303	57,908	33,323	6,632	1,604	12,907	58,208	2,952	6
OTHER PROVINCES.																		
Assam	2,250		2,250		900		3,150	6,620		675	2,137	1,17,510		20				
North-Western Provinces and Outh.				4,583	34,315	4,927	43,825		3,010	1,06,520	22,113	1,147	21,913	6	600	643		
Punjab	5		5		1,194	4	1,199				1,723	503	3,377		34			
Central Provinces				6,006			6,006			403								
Rajputana States					270		270							10				
Bombay														7,691				
Madras					5,427		5,427							5		3,041		
Burmah	2,786		2,786				2,786		200					531				
Sind																		
Other places	60		60		34	4	98								31,341	13,742		
Grand Total 1887	9,68,106	37,731	10,05,837	2,17,059	1,07,328	28,672	11,75,802	25,17,347	2,845,985	5,18,960	57,981	33,323	6,632	1,604	12,907	58,208	2,952	6
of Imports in Nov. 1888	8,19,537	66,080	8,85,617	5,05,224	3,16,161	27,334	11,69,502	19,01,755	2,383,122	3,39,063	1,59,283	1,33,502	1,04,828	1,654	30,722	55,362	980	

* One munda of paddy is equivalent to 25 seers of rice. † Exclusive of bags obtained by local manufacture.

The Sea-borne Trade of Calcutta in these Staples during the month of November 1887 was as follows:—

EXPORTED FROM CALCUTTA--																		
To Indian ports, viz.--																		
Bombay	2,56,380	.....	2,86,380	1,022	24,820	607	3,13,528	.....	1,912,784	.....	.....	887	.....	.....	.....	605	.....	...
Madras	679	.....	679	192	15,525	353	16,729	.....	42,200	.....	.....	1	.....	113	.....	11	.....	...
Other ports in Madras	1,32,424	1,089	1,33,513	.....	6,900	.....	1,39,905	.....	153,350	.....	.....	15	.....	.....	1	7	.....	...
Burmah	6,894	.....	6,894	418	32,407	5,285	46,094	.....	344,700	.....	.....	63	62	7	590	276	.....	...
Other Indian ports	90	.....	90	.....	2,013	.....	2,103	.....	1,96,184	.....	.....	2	5	.....	630	227	.....	...
Pondicherry ... ..	.....	.....	.....	590	280	.....	680	.....	12,000	.....	.....	.....	.....	.....	.....	.....	.....	...
Sind ... ..	.....	.....	.....	.....	.....	.....	.....	244	.....	.....	.....	.....	.....	.....	.....	.....	.....	...
Total of Inter-port trade	4,26,467	1,089	4,27,148	2,012	81,014	6,315	5,17,089	244	2,601,418	.....	.....	1,088	73	121	1,763	893	.....	...
To Foreign ports--																		
United Kingdom	62,452	.....	62,452	2,45,758	1,87,613	.....	4,95,823	15,07,074	46,760	4,97,716	.....	1,44,043	1,832	399	.....	.....	.....	...
Other Foreign ports	4,55,674	8,221	4,60,712	28,653	23,022	4,155	5,10,542	5,02,082	5,360,643	44,402	100	2,000	1,614	520	704	.....	.....	...
Total of Foreign trade	5,18,126	8,221	5,23,164	2,74,411	2,10,635	4,155	10,12,305	5,09,166	5,406,803	5,42,178	100	1,46,744	3,446	1,188	704	.....	.....	...
Grand Total (1887 of Exports in Nov. 1886)	9,44,493	9,310	9,50,312	2,77,023	2,92,649	10,470	15,30,384	20,99,490	8,067,811	6,42,178	100	1,47,813	3,822	1,349	8,497	423	.....	...
	9,94,014	9,506	9,99,955	5,37,361	1,46,850	10,208	15,92,998	13,99,737	13,654,276	3,34,637	78,887	1,31,546	30,202	379	9,311	.....	.....	...

The following Statement shows the several Routes followed by the Trade in the Principal Staples of Traffic imported into Calcutta during the month of November 1887.

IMPORTS INTO CALCUTTA.

SPECIFICATION OF ROUTES.	FOOD-GRAINS.					FIBROUS PRODUCTS.		OIL-SEEDS.		Tea, Indian.	Cotton, raw.	Silk, raw.	SUGAR.		TOBACCO.	
	Rice.	Paddy.	Wheat.	Gram and pulses.	Other food-grains.	Jute, raw.	Gunny-bags.	Linseed.	Mustard seed.				Un-clarified.	Un-drained.	Bisulph.	Other kinds.
	Mds.	Mds.	Mds.	Mds.	Mds.	Mds.	No.	Mds.	Mds.	Mds.	Mds.	Mds.	Mds.	Mds.	Mds.	Mds.
Country boats ...	6,42,653	88,029	66,092	2,33,538	10,748	8,13,185	897,365	1,02,724	44,897	...	4,877	...	4,684	20,209	...	15,350
Steamers ...	9,506	17	3,050	1,419	...	4,07,573	...	10,740	3,307	1,00,229	...	...	...	...	...	1,735
East Indian ...	1,95,883	584	1,45,553	1,45,601	17,920	...	28,875	4,96,367	55,065	12,548	28,504	...	1,075	14,607	...	784
Railway ...	41,172	...	334	2,17,201	...	12,39,855	1,865,885	8,900	612	45,923	243	...	...	172	1,089	2,103
Eastern Bengal State Railway ...	53,619	5,781	220	...	...	81,653	51,600	...	...	...	666	...	7,508	16,734	...	7,508
Grand total ...	21,264	...	...	5,569	4	5,679	2,700	429	...	2,073	8,885	...	...	13,712	...	510
Grand total of 1887 ...	9,68,106	93,821	2,17,059	6,01,328	28,072	25,17,347	2,845,985	6,18,060	81,881	1,52,483	43,203	1,704	51,913	72,623	2,935	40,211
Grand total of 1886 ...	8,19,537	66,089	5,05,223	5,16,101	27,334	19,01,735	2,383,122	3,39,063	1,59,232	1,35,392	1,61,328	1,634	39,722	55,352	930	35,821

The following Statement shows the Values, Quantities, and Numbers of the Principal Staples of Traffic exported Inland from Calcutta during the month of November 1887.

EXPORTS FROM CALCUTTA.

Other exported.	Cotton piece-goods.		Cotton twist.		Salt.	Gunny-bags.	Whither exported.	Cotton piece-goods.		Cotton twist.		Salt.	Gunny-bags.
	European.	Indian.	European.	Indian.				European.	Indian.				
	Rs.	Rs.	Mds.	Mds.	Mds.	No.		Rs.	Rs.	Mds.	Mds.	Mds.	No.
BENGAL.													
Iwan	3,28,000	1,329	336	1,693	46,254	76,612	CHOTA NAGPORE.						
bhoora	1,85,157	3,520	78	619	16,701	84,035	Hazareebagh	62,118	3,636	7	168	4,772	2,135
asporo	2,77,440		4,186		25,810	7,501	Manbloom	61,723		71	1,515	7,354	3,355
ghly	1,61,140	3,032	740	183	2,554	63,620	Total of Chota Nagpore	1,13,841	3,636	78	1,683	12,125	6,900
exgunans	1,87,784	11,468	518		11,134	6,719	Grand total of supplies into the Provinces under the Lieutenant-Governor of Bengal	1,01,29,468	51,240	22,008	10,023	7,51,314	1,084,233
des	4,43,555		2,764		30,547	60,886							
hna	1,26,654		189		8,755	2,100							
ota	1,50,067		975		26,631	2,135	OTHER PROVINCES.						
ahadabad	91,875		149		15,206	11,067	Assam	4,25,691		35	5	30,553	23,807
agore	1,20,960		113	64	9,138	1,815	North-Western Provinces						
ahalye	4,84,640		41	15	21,034	14,400	Punjab	26,66,097	16,060	3,155	754	44,019	5,70,490
gore	5,24,097		139	41	21,602	850	Central Provinces	10,55,279	10,540	1,117	9		1,52,215
na	2,67,960			17	5,393	20,655	Rajputana States	20,790	110	295	56		112,910
na	3,39,358		213		89,899	980	Berar	43,681		187			14,460
eding	92,368		66	24	744		Nizam's Territory	4,284					
agore	2,67,922		37	12	10,960	140	Bombay	4,145		140			1,013,519
na	13,85,694		2,151	170	31,667	2,075	Madras	81,063		806	112		195,650
redpore	6,38,290		2,338		25,934	10,885	Pondicherry						12,200
urungu	2,49,668		916		27,870	1,260	Burmah	3,41,431	122	2,002	1,925		344,700
temsinh	1,59,848		32		18,175	1,618	Other places	15,361	755	10	339		8,406,393
rahi					9,573		Grand Total of 1887	1,17,67,110	79,067	20,015	12,743	8,29,513	9,830,507
gong	1,88,298		188		1,27,850	200	Exports in November 1886	1,28,92,631	1,83,258	28,987	11,734	6,10,632	15,297,030
choly	4,780		8		4,475		The Sea-borne Trade of Calcutta in these Staples during the month of November 1887 was as follows:—						
al of Bengal	66,05,463	19,310	16,201	2,873	4,68,581	497,994	IMPORTED INTO CALCUTTA.						
BEHAR.													
ia	2,01,771	8,140	237	381	69,995	118,178	Rs.*	Rs.	Mds.	Mds.	Mds.	No.	
	1,53,451	550	19	704	11,464	17,570	From Foreign Ports—						
abad	3,21,426	339	8	249	21,100	22,050	United Kingdom	1,11,79,880		11,758		6,38,790	
ufferpore	95,081			36	2,606	2,870	Other Foreign ports	1,01,841		159		1,05,137	
huma	5,30,949	220	11	1,087	43,361	109,510	Total of Foreign Trade	1,12,78,724		14,916		8,33,927	
ri	3,69,960	7,810	10	49	23,423	1,155	From Indian Ports—						
uparin	3,56,265	770	5	139	15,008	31,835	Bombay	5,861	68,509	78	8,960	56,398	
gher	1,65,233	3,060		662	11,901	45,170	Other ports in Bombay						
ulpore	3,62,548	4,730	49	470	15,927	88,445	Madras	1,109	6,940		214		
eah	1,86,039	550	14	629	8,089	7,827	Other ports in Madras						
dkh	100				6,000	1,000	Burmah	3,250	2,596		91	200	
hal Pergannahs	2,00,376	1,210	119	547	21,879	36,505	Other Indian ports	14,800		3	16	2,900	
							Pondicherry						
al of Behar	31,14,775	28,270	403	5,332	2,51,323	511,815	Total of Interport Trade	25,023	78,343	81	9,304	56,308	2,200
ORISSA.													
ack	20,000		875	4	681	2,200	Grand Total of Im- 1887	1,13,03,747	78,343	14,997	9,341	8,90,235	2,200
ore	2,75,980		4,392	131	22,234	66,194	ports in November 1886	1,05,25,871	2,92,871	11,881	7,910	6,56,038	840
al of Orissa	2,96,980		5,267	135	22,915	68,334	* As per tariff declaration value.						

* As per tariff declaration value.

The following Statement shows the several Routes followed by the Trade in the Principal Staples of Traffic exported from Calcutta during the month of November 1887.

SPECIFICATION OF ROUTES.	COTTON PIECE-GOODS.		COTTON TWIST.		Salt.	Gunny-bags.
	European.	Indian.	European.	Indian.		
	Rs.	Rs.	Mds.	Mds.	Mds.	No.
Country boats ...	2,86,762	300	5,243	...	8,44,929	133,091
Steamers ...	9,55,283	...	981	175	32,086	27,765
East Indian Railway ...	75,32,154	63,690	5,884	10,175	3,29,584	1,493,100
Eastern Bengal State Railway ...	49,07,574	...	8,951	176	1,00,905	103,530
Grand total ...	2,11,073	14,200	617	160	3,798	3,799
Grand total of Exports in November 1887 ...	8,74,018	877	8,309	2,041	18,212	8,067,011
Grand total of Exports in November 1886 ...	1,47,67,440	79,067	36,015	12,733	8,29,513	9,830,507
Grand total of Exports in November 1886 ...	1,28,92,631	1,83,258	28,987	11,734	6,10,632	15,297,030

STATISTICAL DEPARTMENT,
The 18th February 1888.

P. NOLAN,
Secretary to the Govt. of Bengal.

Meteorological Report of the Province

METEOROLOGICAL DIVISION.	DISTRICT.	Representative stations.	STATION OBSERVATIONS.															
			AIR PRESSURE.					TEMPERATURE.					HUMIDITY.		CLOUD.		Remarks.	
			High at 10 A.M., barometer reading of month.	Lowest at 10 A.M., barometer reading of month.	Mean, 10 A.M., for month.	Mean reduced to sea-level.	Variation from normal mean.	Highest of month.	Lowest of month.	Mean daily maximum temperature.	Mean daily minimum temperature.	Mean daily temperature.	Variation from normal mean.	Mean, 10 A.M., humidity.	Variation from normal mean.	Mean cloud amount, 10 A.M.	Variation from normal mean, 10 A.M.	
ORISSA.	Pooree	Gopalpore	30.168	29.913	30.071	30.121	+0.10	81.2	58.0	77.8*	65.1*	71.5*	+1.5	63	-	1.4	-	0
		False Point	30.216	29.954	30.111	30.153	+0.23	80.4	59.0	76.9	67.5	67.2	-1.0	73	-6	1.6	-0.6	3
	Cuttack	Cuttack	30.153	29.899	30.025	30.139	+0.57	83.4	54.3	72.1	60.1	71.3	-1.0	57	-8	1.0	+0.2	0
	Balasore	Balasore	30.186	29.936	30.063	30.134	+0.11	87.4	48.6	73.5	54.9	66.7	-0.8	54	-	2.1	-	11
SOUTH-WEST BENGAL.	South-West Midnapore and South 24-Pergunnahs.	Sankar Island	30.255	29.982	30.115	30.152	+0.41	79.2	51.2	75.0	57.9	66.4	-1.8	65	-1.1	2.7	+0.9	01
	Midnapore	Midnapore	30.119	29.874	30.046	30.167	+0.41	83.3	48.1	77.4	54.3	65.9	-0.5	52	-	2.1	-	0
	24-Pergunnahs, Howrah and Hooghly.	Calcutta	30.221	29.984	30.122	30.144	+0.25	78.2	47.7	74.2	54.8	64.5	-1.7	57	-1.5	2.0	+1.5	01
	Burdwan	Burdwan	30.153	29.912	30.032	30.147	+0.24	81.0	46.4	73.6	54.0	64.8	-1.5	47	-1.7	3.1	+1.4	11
	Bankoora	Bankoora	29.930	29.674	29.817†	-	-	79.6	49.8	72.5*	54.9*	63.7*	-	64	-	2.6	-	11
	West Burdwan and Beerbhoom.	Ramganj	29.930	29.671	29.810	30.126	+0.50	80.5	47.2	75.3	53.7	64.5	-1.3	55	-	2.8	-	04
	Moorshedabad	Berhampore	30.194	29.953	30.080	30.150	+0.46	78.1	45.6	71.0†	52.7	63.4†	-1.0	63	-6	3.8	+1.7	02
	Nudda	Krishnagar*	30.161	29.913	30.062	30.131	-	79.9	43.9	75.2	51.1	63.2	-	54	-	3.1	-	06
	Jessore and Khoosha	Jessore	30.213	29.970	30.104	30.159	+0.39	80.2	44.4	76.3	52.4	64.4	-1.1	62	-6	3.3	+1.6	14
	Chittagong	Chittagong	30.117	29.894	30.049	30.112	+0.25	82.1	49.7	78.0	55.1	66.6	+0.1	71	-1	1.6	+0.3	23
EAST BENGAL.	Chittagong Hill Tracts	Dumagiri	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
	Buckerganj	Barrisal	30.210	29.965	30.106	30.119	+0.46	79.3	47.6	74.9	53.9	64.4	+0.6	66	-	2.2	-	21
	Noakhully	Noakhully	30.164	29.910	30.037	30.115	+0.47	81.5	45.5	76.7*	51.6	64.2*	-0.5	58	-	2.1	-	21
	Furreedpore	Furreedpore	30.191	29.945	30.068	30.134	+0.55	74.7	42.0	72.7	51.6	62.2	-1.2	64	-	1.6	-	03
	Dacca	Dacca	30.206	29.978	30.103	30.126	+0.41	81.1	48.1	76.5	53.7	65.1	-1.2	63	-6	2.2	+0.6	04
	Commillah	Commillah	30.173	29.933	30.053*	30.117*	+0.27	83.1	46.1	77.2*	51.8*	64.5*	+0.4	65	-	2.6	-	03
	Mymensingh	Mymensingh	30.176	29.937	30.057	30.133	+0.52	79.4	43.6	73.4	51.4	62.4	-0.3	73	-	3.1	-	01
	Bogra	Bogra	30.155	29.909	30.058	30.104	-	79.1	41.9	74.6	51.0	62.8	-	62	-	1.8	-	01
	Pubna	Seraikunji	30.185	29.944	30.078	30.126	+0.42	79.4	41.0	74.8*	50.6*	62.7*	-0.1	67	-	2.0	-	01
	Rajshahye	Rampore Beau-leah.	30.169	29.930	30.065	30.138	+0.54	79.2	41.7	73.7	49.7	61.2	-0.7	50	-	1.3	-	01
NORTH BENGAL.	Maldah	Maldah	30.178	29.927	30.062	-	-	77.6	39.9	75.2	48.2	61.7	-	61	-	2.5	-	06
	Dinapore	Dinapore	30.091	29.877	29.987	30.114	+0.17	78.1	41.4	73.6	48.6	61.1	-0.6	64	-	2.4	-	00
	Rungpore	Rungpore	30.121	29.897	29.987	30.119	+0.01	77.3	40.8	72.6	50.0	61.3	+0.2	75	-	0.4	-	01
	Julpigoree and Cooch Behar.	Julpigoree	29.981	29.713	29.841	30.145	+0.53	78.9	43.5	71.9	49.8	60.9	-0.6	77	-	3.3	-	03
	Darjeeling Hill Tracts...	Darjeeling	29.153	28.797	29.000	-	-0.13	58.8	27.9	42.9†	33.4†	38.1†	-1.7	82	+3	5.9	+0.5	06
	Purneah and North Bhagulpore.	Purneah	30.147	29.892	30.022	30.166	+0.52	76.2	40.9	71.3*	46.3*	58.9	-2.7	69	+2	2.2	+0.9	01
	Mozufferpore	Mozufferpore	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
	Durbhunga	Durbhunga	30.114	29.853	29.877	30.136	+0.40	75.6	46.8	68.9	52.2	60.0	-1.5	-	-	2.4	+1.1	01
	Chumprau	Motihari	30.091	29.810	29.880*	30.119*	+0.20	77.7	40.1	71.4	45.2	58.3	-1.3	58*	-	3.5	-	03
	Saran	Chupra	30.097	29.852	29.942	30.149	+0.58	76.5	41.1	70.3	48.8	60.6	-1.3	74	-	2.0	-	03
SOUTH BENGAL.	Shahabad	Dehree	29.962	29.665	29.754	30.169	+0.63	77.0	47.0	64.8†	52.2†	60.3†	-1.3	55	-	3.1	-	17
		Buxar	30.068	29.801	29.909	30.167	+0.50	77.9	42.9	70.7	48.2	59.5	-2.9	59	-	3.5	-	11
		Arrah	30.075	29.813	29.928	30.137	+0.57	76.3	42.9	69.9	47.4	58.7	-2.6	64	-	3.1	-	10
	Gya	Gya	29.877	29.626	29.745	30.133	+0.12	78.5	45.0	71.8	50.8	61.3	-2.3	53	-1	3.5	+1.7	16
	Patna	Bankipore	30.119	29.839	29.973	30.168	+0.30	76.7	43.9	70.2	49.3	59.8	-1.3	62	-5	4.1	+1.7	04
	South Bhagulpore and Monghyr.	Bhagulpore	30.109	29.850	29.975	30.141	+0.49	78.4	42.0	72.8	48.3	60.6	-1.0	53	-	1.7	-	05
	Sonthal Pergunnahs	Naya Doonika	29.775	29.482	29.621	-	+0.34	78.3	43.0	72.7	50.1	61.5	-1.7	51	-	2.5	-	01
	Hazaribagh	Hazaribagh	28.267	27.959	28.071	30.168	+0.42	74.4	42.9	67.9	40.1	58.0	-3.1	52	+2	3.5	+1.6	10
	Joharugga and Manbhoom.	Ranchee	28.066	27.807	27.933	30.148	+0.33	74.4	43.8	68.8	40.1	58.0	-2.3	64	-	4.1	-	10
	Singbhoom	Chyebassa	29.463	29.204	29.328	-	+0.20	82.5	46.0	78.2	53.4	64.3	-2.2	54	-	3.4	-	11
CHUTIA NAGPUR.		Sibsagar	29.942	29.700	29.810	30.166	+0.10	74.7	43.7	68.1	40.6	58.8	-0.0	53	+8	5.1	-0.3	21
	Assam	Dhubri	30.144	29.880	30.011	30.136	+0.65	80.3	46.5	78.9	52.9	63.4	-0.1	75	+2	2.3	+0.8	01
		Sitchar	30.137	29.893	30.010	30.126	+0.03	83.4	45.0	77.6*	51.1*	64.1*	-0.2	75	0	4.1	+1.4	11

* Mean for 30 days.
† Mean for 28 days.‡ Mean for 28 days.
§ Mean for 28 days.

Bengal for the month of January 1888.

DISTRICT OBSERVATIONS.										Representative stations.	DISTRICT.	METEOROLOGICAL DIVISION.
RAINFALL.												
Of month.					Since 15th May 1887.							
Mean of dis- tribut.	Normal mean.	Variation from mean.	Number of rainy days.	Normal mean num- ber of rainy days.	Mean of dis- tribut.	Normal mean.	Variation.	Mean num- ber of rainy days.	Normal mean num- ber of rainy days.			
1.45	0.24	+1.21	1.8	0.9	41.43	56.51	-12.08	71.7	84.3	Gopalpore ...	Pooree ...	ORISSA.
1.18	0.30	+0.88	2.8	0.8	46.05	52.65	-6.60	77.0	80.8	Cuttack ...	Cuttack ...	
1.32	0.39	+0.93	2.2	0.9	43.16	51.09	-10.93	67.1	77.7	Balasore ...	Balasore ...	
0.87	0.10	+0.47	3.7	0.6	59.15	62.55	-3.40	82.7	85.7	Sangor Island ...	South-West Midnapore and South 24-Pergun- nahs.	
0.66	0.48	+0.38	2.7	1.1	51.32	51.00	-0.32	68.5	72.6	Midnapore ...	Midnapore ...	SOUTH-WEST BENGAL.
1.11	0.16	+0.65	3.1	1.2	41.61	52.31	-10.70	77.2	91.1	Calcutta ...	24-Pergunnahs, Howrah, and Hooghly.	
1.23	0.31	+0.89	2.3	1.0	46.27	46.73	-0.46	73.7	76.0	Burdwan ...	Burdwan ...	
1.25	0.31	+0.94	3.0	1.1	50.00	52.35	-1.75	74.6	83.0	Bankoora ...	Bankoora ...	
0.45	0.46	-0.01	3.0	1.4	48.04	52.47	-4.43	78.1	84.3	Raniganj ...	West Burdwan and Beerbhoom.	EAST BENGAL.
0.33	0.45	-0.12	2.7	1.1	59.14	49.82	+9.32	83.3	78.9	Berhampore ...	Moorshedabad ...	
0.37	0.34	+0.23	1.2	1.1	43.35	49.50	-6.15	75.0	78.4	Krishnagore ...	Nuddea ...	
1.01	0.47	+0.54	1.8	1.2	42.51	53.95	-11.44	78.4	85.6	Jessore ...	Jessore and Khoolna ...	
3.80	0.51	+3.29	2.5	1.2	99.89	114.63	-14.74	107.0	108.4	Chittagong ...	Chittagong ...	NORTH BENGAL.
2.35	0.51	+1.84	2.0	1.3	63.85	82.32	-18.47	106.5	111.6	Demagiri ...	Chittagong Hill Tracts	
1.97	0.62	+1.35	2.3	1.3	61.20	78.29	-17.00	93.9	107.5	Barrisa ...	Backergunj ...	
1.72	0.63	+1.09	2.5	1.5	71.39	109.70	-38.31	94.5	109.9	Noakholly ...	Noakholly ...	
0.71	0.42	+0.29	1.0	1.3	56.61	56.40	-19.79	69.7	87.9	Furtehpore ...	Furtehpore ...	NORTH BENGAL.
0.63	0.39	+0.24	1.8	1.5	40.92	61.16	-20.24	86.3	91.8	Dacca ...	Dacca ...	
1.17	0.62	+0.55	1.8	1.5	43.18	71.50	-28.32	77.0	98.2	Comilla ...	Comilla ...	
0.11	0.40	-0.29	0.6	1.2	60.64	67.69	-7.05	74.4	90.2	Mymensingh ...	Mymensingh ...	
0.05	0.40	-0.35	0.8	1.1	60.53	57.17	+3.36	72.7	78.5	Bogra ...	Bogra ...	NORTH BENGAL.
0.23	0.42	-0.19	2.0	1.4	44.23	53.95	-9.72	81.0	81.1	Serajgunj ...	Pubna ...	
Nil	0.56	-0.56	Nil	1.9	43.57	54.20	-4.63	63.0	77.7	Rampore Beau- loah.	Rajshahye ...	
0.98	0.49	-0.41	1.5	1.6	46.69	54.88	-8.19	72.5	85.0	Maldah ...	Maldah ...	
0.09	0.41	-0.32	1.6	1.3	69.15	56.17	+12.98	79.6	77.8	Dinapore ...	Dinapore ...	NORTH BENGAL.
0.37	0.49	-0.12	2.5	0.8	80.97	73.44	+7.53	77.8	76.1	Rungpore ...	Rungpore ...	
0.30	0.43	+0.07	3.4	1.1	117.92	110.49	+7.43	92.0	97.8	Jalpigoree ...	Jalpigoree and Cooch Behar.	
1.01	0.90	+0.11	4.0	2.5	118.18	121.11	-2.93	120.4	113.5	Darjeeling ...	Darjeeling Hill Tracts...	
0.28	0.51	-0.23	2.0	1.2	65.32	58.03	+7.29	75.4	70.1	Purneah ...	Purneah and North Bhagulpore.	NORTH BENGAL.
0.45	0.07	-0.22	2.0	1.6	47.33	43.30	+4.03	61.7	57.7	Mozafferpore ...	Mozafferpore ...	
0.35	0.05	-0.30	1.3	1.4	49.97	44.41	+5.56	66.6	57.5	Durbhanga ...	Durbhanga ...	
0.44	0.60	-0.25	3.0	1.3	40.82	46.55	+5.73	57.0	53.9	Motihari ...	Champaran ...	
0.90	0.65	+0.25	3.0	1.7	40.25	43.16	-2.91	46.6	57.7	Chupra ...	Saran ...	NORTH BENGAL.
1.00	0.05	+0.41	2.3	1.9	38.61	40.34	-1.73	63.5	61.5	Buxar ...	Shahabad ...	
1.29	0.63	+0.67	4.3	1.9	39.29	41.70	-2.41	60.6	57.5	Gya ...	Gya ...	
0.77	0.56	+0.21	3.0	1.8	36.21	41.56	-4.75	59.1	62.5	Bankipore ...	Patna ...	
0.65	0.53	+0.10	3.0	1.7	43.58	43.18	+0.40	62.2	60.7	Bhagulpore ...	South Bhagulpore and Monghyr.	CHUTIA NAGPUR.
0.41	0.30	+0.05	3.7	1.9	52.90	50.53	+2.37	78.2	76.1	Naya Doonka ...	Southal Pergunnahs ...	
1.15	0.45	+0.70	4.5	1.3	47.57	50.64	-3.07	70.5	82.3	Hazaribagh ...	Hazaribagh ...	
1.18	0.56	+0.62	4.5	1.7	45.82	47.44	-1.62	71.6	82.6	Ranchee ...	Lohardugga and Man- bhoom.	
1.86	0.68	+0.98	4.0	1.7	51.28	51.53	-0.25	75.0	93.3	Chyebassa ...	Singbhoom ...	CHUTIA NAGPUR.
										Sibsagar ...		
										Dhubri ...	Assam ...	
										Silchar ...		

Table of Rainfall recorded at Stati

Meteorological division.	District.	Station.	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	18	19
ORISSA	Poores	Poores																			
		Khurda																			
		Banpur																			
		False Point																			
		Gop																			
	Cuttack	Pepli																			
		Jugatsingapore																			
		Bunki																			
		Cuttack																			
		Kendrapara																			
	Balasore	Jaipore																			
		Dharnasalla																			
		Salipore																			
		Chandbali																			
		Bhuddruck																			
SOUTH-WEST BENGAL.	Midnapore	Sorah																			
		Balasore																			
		Jellapore																			
		Baripodah																			
		Contai																			
	24-Pergunnahs	Saugor Island																			
		Tundoo																			
		Madnapore																			
		Ghatol																			
		Kakrabaty																			
	Howrah	Heria																			
		Bhagwanpore																			
		Garbeta																			
		Diamond Har-																			
		bour.																			
	Hooghly	Canning Town																			
		Alipore Jail																			
		Barneckpore																			
		Dum-Dum																			
		Baraset																			
	Burdwan	Busserhat																			
Culna																					
Burduwan																					
Culwa																					
Bankoora	Ramgungo																				
	Mankur																				
	Bankoora																				
	Boshempore																				
	Mahara																				
Teerbhoom	Khatra																				
	Indas																				
	Kotalpore																				
	Arida																				
	Gonzajalghati																				
Nudda	Raipore																				
	Sonamukhi																				
	Bh. Soory																				
	Hetampore																				
	Rampore Hunt																				
Khoolna	Bi-lour																				
	Ramchhat																				
	Kisharghur																				
	Choonbanga																				
	Meherpore																				
Jessore	Kooshten																				
	Satkhira																				
	Bakurhat																				
	Khoolna																				
	Narail																				
Moorshedabad	Jessore																				
	Jheondah																				
	Makoorah																				
	Bongong																				
	Kandi																				
Chittagong Hill Tracts.	Berlimpore																				
	Lalboah																				
	Azimungo																				
	Jungipore																				
	Lakola																				
Noakholly	Akhrganj																				
	Patikubari																				
	Cox's Bazar																				
	Chittagong																				
	Kutubdia																				
Rangamati	Satkanya																				
	Rangamati																				
	Ituma																				
Patukhally																					
	Perozopore																				
	Burisal																				
	Bhola																				
	Gowrnadl																				
Noakholly	Bauphal																				
	Noakholly																				
	Fenny																				

21	22	23	24	25	26	27	28	29	30	31	Number of rainy days	Average number of rainy days	Total rainfall for the month	Average rainfall for the month	Mean of the month	Mean of the month	Mean of the month	Mean of the month	Mean of the month	Mean of the month	Station	District	Metereological division
						0.02	1.17						0.8	1.9	0.3	1.17	1.1	0.9	1.0	1.0	Poonce	ONISSA	
						0.7	0.30						1.0	0.7	0.7	0.7	0.7	0.7	0.7	0.7			
						0.0	0.16						1.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0			
						1.1	0.16						1.0	0.7	0.7	0.7	0.7	0.7	0.7	0.7			
						0.74							1.0	0.7	0.7	0.7	0.7	0.7	0.7	0.7			
						1.00	1.01						1.0	2.01	0.0	1.01	0.1	0.1	0.1	0.1	Takatsingp	Cutback	
						0.04	0.19						1.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0			
						0.1	0.17						1.0	0.84	0.4	0.4	0.4	0.4	0.4	0.4			
						0.8	0.0						0.7	1.03	0.1	0.0	0.1	0.1	0.1	0.1			
						0.0	0.15						1.0	1.0	0.1	1.0	1.0	1.0	1.0	1.0			
						0.19	0.0						1.0	1.01	0.0	0.0	1.0	0.0	0.0	0.0			
						2.00	0.50						0.7	2.50	0.18	0.0	2.0	0.18	0.18	0.18			
						0.17	1.20						0.7	1.47	0.0	1.0	1.07	0.0	0.0	0.0			
						0.1	0.10						0.8	0.5	0.0	0.0	0.0	0.0	0.0	0.0			
						0.11	1.0						0.8	1.8	0.3	1.1	1.8	0.3	0.3	0.3			
						0.84							1.0	1.3	0.7	0.8	1.2	0.7	0.7	0.7			
						1.2	0.41						1.2	0.41	0.0	0.0	0.41	0.0	0.0	0.0			
						0.7	0.50						0.7	0.9	0.1	0.17	0.1	0.1	0.1	0.1			
						0.17	0.10						0.8	0.8	0.1	0.0	0.80	0.0	0.0	0.0			
						0.1	0.10						0.8	0.8	0.1	0.0	0.8	0.0	0.0	0.0			
						0.21	0.14						1.1	0.88	0.0	0.0	0.88	0.0	0.0	0.0			
						0.11	0.10						1.1	0.87	0.1	0.1	0.87	0.1	0.1	0.1			
						0.19	0.10						1.1	1.01	0.0	0.0	1.01	0.0	0.0	0.0			
						0.11	0.10						1.1	0.17	0.0	0.0	0.17	0.0	0.0	0.0			
						0.31	0.8						1.1	1.08	0.0	1.08	1.08	0.0	0.0	0.0			
						1.08							1.1	1.08	0.0	1.08	1.08	0.0	0.0	0.0			
						0.1	1.10						1.1	1.1	0.0	1.1	1.1	0.0	0.0	0			

Table of Rainfall recorded at Station

[illegible]

in Bengal in January 1888—continued.

21	22	23	24	25	26	27	28	29	30	31	Number of rainy days.	Average number of rainy days.	Total rainfall for the month.	Average rainfall for the month.	Heaviest rainfall during the month.	Total rainfall for the month.	Station.	District.	Meteorological division.
...	0.11	1.10	...	...	...	12	1.51	1.51	1.51	1.51	1.51	Hatibara	Northchally—conold.	EAST BENGAL—conold.
...	0.23	1.50	...	...	...	11	1.11	1.11	1.11	1.11	1.11	Madanpur	Furrowedpore.	
...	0.72	...	...	...	...	11	1.14	0.72	0.72	0.72	0.72	Furrowedpore.		
...	0.40	...	...	...	...	12	1.12	0.40	0.40	0.40	0.40	Goalunda.		
...	0.34	0.27	...	...	...	12	1.13	0.61	0.54	0.51	0.51	Munsharunge.	Dacca.	
...	0.50	0.39	...	...	...	13	1.13	0.55	0.50	0.50	0.50	Dacca.		
...	0.26	0.25	...	...	...	13	1.13	0.51	0.51	0.51	0.51	Naraingunge.		
...	0.46	...	...	...	...	17	1.17	0.46	0.46	0.46	0.46	Munsharunge.		
...	0.20	...	...	...	...	1	?	0.20	?	0.20	0.20	Jogdipore.		
...	1.40	...	...	...	1	1.14	1.40	0.83	1.40	0.83	Agartola	Hill Tipperah.	
...	0.35	0.45	...	...	...	2	2.1	0.80	0.50	0.45	0.80	Comilla	Tipperah.	
...	1.25	0.50	...	...	...	10	1.10	1.75	0.52	1.25	1.75	Comilla.		
...	0.42	0.39	...	...	...	15	1.15	0.74	0.77	0.42	0.74	Brahmanbaria.		
...	0.31	0.67	...	...	...	12	?	0.98	?	0.67	0.98	Raichanda.		
...	0.34	...	...	...	...	1	?	0.34	?	0.34	0.34	Nasirganj.		
...	0.14	0.11	...	...	...	?	?	0.25	?	0.14	0.25	Dundia.		
...	0.25	...	...	...	...	1	?	0.25	?	0.25	0.25	Kashra.		
...	0.40	0.75	...	...	...	10	?	0.75	?	0.40	0.75	Lakshana.		
...	0.19	...	...	...	...	1	1.10	0.19	0.57	0.19	0.19	Kishoreganj.	Mymensingh.	
...	0.15	...	...	...	...	Nil	13	Nil	0.59	Nil	0.59	Atia (Tangra).		
...	1	13	0.15	0.55	0.15	0.15	Mymensingh.		
...	Nil	0.9	Nil	0.45	Nil	0.45	Jamshil.		
...	0.23	...	...	...	...	1	0.8	0.23	0.11	0.23	0.23	Netrokona.		
...	0.17	...	...	...	...	1	?	0.17	?	0.17	0.17	Saharadhat.		
...	0.20	...	...	...	...	2	?	0.20	?	0.20	0.20	Durgam.		
...	Nil	?	Nil	?	Nil	?	Durgam.		
...	0.15	...	...	...	...	3	1.13	0.18	0.59	0.15	0.18	Palma	Pabna.	NORTH BENGAL.
...	0.27	...	...	...	...	1	1.14	0.27	0.45	0.27	0.27	Sherpur.		
...	0.05	...	...	...	...	1	1.12	0.05	0.35	0.05	0.05	Sherpur.	Bogra.	
...	0.07	...	...	...	...	Nil	1.10	Nil	0.55	Nil	0.55	Nowkhilla.		
...	0.07	...	...	...	...	1	0.9	0.07	0.43	0.07	0.07	Bogra.		
...	0.09	...	...	...	...	1	0.7	0.09	0.55	0.09	0.09	Panchbibi.		
...	Nil	1.1	Nil	0.60	Nil	0.60	Beaulah.	Rajshahi.	
...	Nil	0.9	Nil	?	Nil	?	Chittore.		
...	Nil	?	?	?	?	?	Atangra.		
...	0.26	...	...	...	...	1	?	0.26	?	0.26	0.26	Lalpur.		
...	Nil	?	?	?	?	?	Maada.		
...	0.02	...	...	...	...	1	1.14	0.02	0.64	0.02	0.02	Maldah.	Maldah.	
...	0.06	...	...	...	...	2	1.17	0.06	0.51	0.06	0.06	Chandah.		
...	0.02	...	...	...	...	Nil	?	?	?	?	?	Gopal.		
...	0.04	...	...	...	...	3	?	0.08	?	0.04	0.08	Singaj.		
...	0.01	...	...	...	...	1	1.19	0.01	0.50	0.01	0.01	Mohadepore.	Dinapore.	
...	0.06	...	...	...	...	1	1.11	0.06	0.50	0.06	0.06	Chandah.		
...	0.05	...	...	...	...	3	1.15	0.05	0.57	0.05	0.05	Kangra.		
...	0.05	...	...	...	...	2	1.16	0.05	0.55	0.05	0.05	Dinapore.		
...	Nil	1.12	Nil	0.59	Nil	0.59	Bahadur.		
...	0.10	...	...	...	...	2	0.8	0.23	0.54	0.10	0.23	Bhawanganj.	Rangpur.	
...	0.04	...	...	...	...	3	0.8	0.15	0.41	0.08	0.15	(Gadbanda).		
...	0.03	...	...	...	...	2	0.8	0.16	0.51	0.13	0.16	Kangra.		
...	0.22	0.45	...	...	...	3	0.7	0.92	0.50	0.15	0.92	Kangra.		
...	Nil	?	Nil	?	Nil	?	(Nagpur).		
...	Nil	?	Nil	?	Nil	?	Litpur.		
...	0.17	0.47	0.21	...	...	3	1.14	0.85	0.51	0.47	0.85	Jalpur.	Jalpur.	
...	0.31	...	...	...	...	1	1.14	?	?	?	?	Alpur.		
...	0.47	0.28	...	...	...	2	?	0.75	?	?	?	Falacatta.		
...	0.05	0.10	0.50	0.03	...	4	?	0.68	?	0.50	?	Dabga.		
...	0.05	0.04	0.41	0.19	...	5	1.11	0.72	0.54	0.11	0.72	Dabga.	Cooch Behar.	
...	0.38	0.07	...	...	...	4	1.11	0.27	0.43	0.11	0.27	Cooch Behar.		
...	0.05	0.11	0.07	...	...	3	1.13	0.45	0.57	0.18	0.45	Mackhara.		
...	3	1.13	0.23	0.54	0.11	0.23	Mataban.		
...	0.21	0.24	0.52	0.69	0.19	1.19	6	3.3	2.47	1.12	1.19	Bura.	Darjeeling Hill.	
...	0.12	0.16	0.10	...	...	3	1.13	0.52	0.68	0.12	0.52	Singra.		
...	0.27	0.16	0.05	...	...	4	2.8	0.62	0.69	0.27	0.62	Darjeeling.		
...	0.44	...	...	...	...	3	2.7	0.63	1.06	0.44	0.63	Kalimpong.		
...	0.08	0.10	...	...	...	2	1.13	0.18	0.62	0.10	0.18	Kissengunge.	Purnea.	NORTH BENGAL.
...	0.14	0.16	...	...	...	2	0.9	0.59	0.51	0.16	0.59	Arrah.		
...	0.10	0.03	...	...	...	3	1.12	0.21	0.47	0.10	0.21	Purnea.		
...	?	?	?	?	?	?	Gandaria.		
...	0.15	...	...	...	...	1	?	?	?	?	?	Bahadur.		
...	0.15	0.03	...	...	...	2	?	0.15	?	0.15	0.15	Matra.		
...	?	?	?	?	?	?	Kalaganj.		
...	0.42	...	...	...	...	1	?	0.42	0.47	0.42	0.42	Madhapore.	North Bhagalpur.	
...	0.14	0.15	...	...	...	2	1.13	0.29	0.47	0.15	0.29	Singra.		
...	0.19	...	...	...	...	1	?	0.19	?	0.19	0.19	Protdiganj.		
...	0.30	...	...	...	...	1	1.14	0.30	0.61	0.30	0.30	Tajpur.	Durbhanga.	
...	0.38	0.22	...	...	...	2	1.14	0.30	0.55	0.38	0.38	Durbhanga.		
...	0.44	...	...	...	...	1	1.14	0.44	0.74	0.44	0.44	Mataban.		
...	0.25	0.10	...	...	...	2	?	0.25	?	0.25	0.25	Bahera.		
...	0.40	...	...	...	...	2	?	0.40	?	0.40	0.40	Rohra.		
...	Nil	1.12	Nil	0.53	Nil	0.53	Saunani.	Mozufferpore.	
...	0.35	0.19	...	...	...	2	1.17	0.71	0.52	0.35	0.71	Mozufferpore.		
...	0.17	0.15	...	...	...	4	1.19	0.61	0.55	0.61	0.61	Happur.		
...	0.30	0.20	...	...	...	2	?	0.30	?	0.30	0.30	Pura.		
...	0.10	...	...	...	...	1	?	0.10	?	0.10	0.10	Mahua.		
...	?	?	?	?	?	?	Sahar.		
...	?	?	?	?	?	?	Pura.		
...	0.12	0.13	...	...	...	3	1.15	0.35	0.47	0.15	0.35	Motihari.	Champan.	
...	0.10	0.05	...	...	...	3	1.11	0.32	0.53	0.10	0.32	Beulah.		
...	0.29	0.15	...	...	...	3	?	0.29	?	0.29	0.29	Baah.		
...	3	?	0.28	?	0.28	0.28	Bahura.		
...	0.39	0.12	...	...	...	3	1.11	0.39	0.50	0.39	0.39	Gopalgunge.	Saran.	
...	0.38	0.26	...	...	...	3	2.2	0.39	0.75	0.32	0.39	Sowan.		
...	0.34	0.13	...	...	...	3	1.17	1.20	0.71	0.73	1.20	Chupra.		

Table of Rainfall recorded at Station

Meteorological division.	District.	Station.	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	18	19	20
SOUTH BEHAR	Shahabad ...	Buxar ...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...
		Dehree ...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...
		Blunboonh ...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...
		Sasseram ...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...
		Ayryh ...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...
		Mohantich ...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...
	Gya ...	Aurungabad ...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...
		Gya ...	...	...	...	...	...	0'01	0'01	...	...	...	...	...	...	...	...	...	...	...	...	...
		Nowadah ...	...	...	...	...	...	0'02	0'02	...	...	...	...	...	...	...	...	...	...	...	...	...
		Jehansab ...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...
		Arwal ...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...
		Pandnagar ...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...
		Sherrahatt ...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...
		Rajauli ...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...
	Patna ...	Pakri Bara- wan.	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...
		Patna ...	...	...	...	...	...	...	0'01	...	...	...	...	...	...	...	...	...	...	...	...	...
		Dinapore ...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...
		Behar ...	...	...	...	...	...	...	0'13	...	...	...	...	...	...	...	...	...	...	...	...	...
	Monghyr ...	Barra ...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...
		Beckram ...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...
		Hilsa ...	...	...	...	...	...	...	0'01	...	...	...	...	...	...	...	...	...	...	...	...	...
		Begowera ...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...
	South Bhagul- pore.	Monghyr ...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...
		Jamui ...	...	...	...	...	...	...	0'01	...	...	...	...	...	...	...	...	...	...	...	...	...
		Gogri ...	...	...	...	...	...	...	0'10	...	...	...	...	...	...	...	...	...	...	...	...	...
		Sheikhpura ...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...
	Southal Per- gunnah.	Blangipore ...	...	...	...	...	...	...	0'01	...	...	...	...	...	...	...	...	...	...	...	...	...
		Banla ...	...	...	...	...	...	...	0'21	...	...	...	...	...	...	...	...	...	...	...	...	...
		Kulgong ...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...
		Rajnchal ...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...
		Godda ...	...	...	...	...	...	...	0'06	...	...	...	...	...	...	...	...	...	...	...	...	...
CHITIA NAG- PUR.	Hazaribagh ...	Pachmura (Girdi).	...	...	...	...	...	0'20	...	...	...	...	...	...	...	...	...	...	...	...	...
	Hazaribagh ...	Santa-gurah ...	...	...	...	0'02	0'30	0'29	...	...	...	...	...	...	...	...	...	...	...	0'04	...	
	Mahudi Hills ...	Jhoomrah Hills ...	...	...	...	...	0'43	...	...	...	...	...	...	...	...	...	...	...	...	...
	Barvi ...	Chatra ...	...	...	...	...	0'78	...	...	...	...	...	...	...	...	...	...	...	...	...
	Karagdeha ...	Ranghar ...	...	...	...	...	0'90	0'39	...	...	...	...	...	...	...	...	...	...	...	...
Lohardugga...	Lohardugga ...	Ranch ...	...	...	...	0'11	0'25	1'40	...	...	...	...	...	...	...	...	...	...	...	...	...
	Palmow ...	Silli ...	...	...	...	0'28	0'56	0'04	...	...	...	...	...	...	...	...	...	...	...	...	...
	Jalumat ...	Hox-inabad ...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...
	Gargah ...	...	...	...	...	...	0'85	...	...	...	...	...	...	...	...	...	...	...	...	...	...
	Singbhoom ...	Chyussaa ...	Chakradhar- pore.	...	...	...	...	0'06	0'16	...	...	...	...	...	...	...	...	...	...	...	...
	Chakela ...	Bakaragura ...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...
Manbhoom ...	Purulia ...	Golendpore ...	...	...	...	...	...	0'13	...	...	...	...	...	...	...	...	...	...	...	...	...
	Raghunath- pore.	Barrabhoom ...	...	...	...	...	...	0'10	...	...	...	...	...	...	...	...	...	...	...	...	...
	Jhalda ...	Chas ...	...	...	...	...	...	0'17	...	...	...	...	...	...	...	...	...	...	...	...	...
	...	...	...	...	...	...	...	0'13	...	...	...	...	...	...	...	...	...	...	...	...	...

Bengal for the month of January 1888—concluded.

1	22	23	24	25	26	27	28	29	30	31	Number of rainy days.	Average number of rainy days.	Total rainfall for the month.	Average rainfall during the month.	Heaviest rainfall during the month.	Total rainfall from 1st January 1887 to 31st Jan 1888.	Average rainfall from 1st January 1887 to 31st Jan 1888.	Station.	District.	Meteorological division.
	0.00	0.70	0.31	0.11	3	2.1	1.15	0.70	0.70	1.15	0.75	River	Shahabad	SOUTH BENGAL.
	1.00	1.00	...	...	0.00	0.00	...	...	...	...	4	1	1.77	?	1.03	1.77	?	Dohree.	
	...	1.10	...	...	...	...	...	...	...	...	1	1.4	1.10	0.08	1.10	1.10	0.08	Banmooch.	
	0.00	0.50	...	...	...	...	...	...	...	...	2	1.8	1.00	0.50	0.50	1.00	0.50	Sisecum	
	0.03	0.00	0.30	3	2.2	0.99	0.83	0.60	0.99	0.83	Arish		Gya.
	...	1.30	...	...	...	...	...	...	...	...	1	?	1.30	?	1.30	1.30	?	Mohanish.	
	0.31	0.39	...	...	0.09	...	...	...	...	...	3	1.8	0.73	0.61	0.33	0.73	0.61	Aurangabad	
	0.06	1.36	...	...	0.02	...	...	...	...	...	5	2.2	1.66	0.71	1.16	1.66	0.73	Gya.	
	0.06	1.28	0.06	5	1.4	1.50	0.70	1.28	1.50	0.70	Nowdah		Patna
	0.02	1.10	...	...	0.08	0.16	...	...	...	...	4	2.0	1.26	0.72	1.10	1.26	0.72	Jehanabad	
	...	1.44	...	...	0.14	...	...	...	...	...	1	?	1.58	?	1.44	1.58	?	Arwal.	
	0.40	0.70	...	...	...	...	...	...	...	...	2	?	1.10	?	0.70	1.10	?	Daundnagar	
	...	0.20	0.50	2	?	0.70	?	0.50	0.70	?	Sherrghati.		Monghyr.
	...	0.50	...	...	0.32	...	...	...	...	...	9	?	0.82	?	0.50	0.82	?	Rajauli.	
	...	0.43	...	...	0.23	0.14	...	...	...	...	4	2.3	0.81	0.69	0.43	0.81	0.69	Patna	
	...	0.48	...	...	0.30	0.10	...	...	...	...	3	1.4	0.88	0.59	0.48	0.88	0.59	Dimpore.	
	...	0.01	2	2.0	1.04	0.67	0.91	1.04	0.67	Behar.		South Bhagalpore.
	...	0.05	0.10	...	0.20	...	...	...	...	...	3	1.4	0.85	0.47	0.20	0.85	0.47	Barrh.	
	...	0.00	...	...	0.10	...	...	...	...	...	2	?	0.90	?	0.80	0.90	?	Hickram.	
	0.03	0.77	...	...	0.15	0.04	...	...	...	...	5	?	1.00	?	0.77	1.00	?	Hilsa.	
	...	0.12	0.10	2	1.4	0.82	0.50	0.71	0.82	0.50	Begoonera.		Monghyr.
	...	0.12	...	...	0.12	...	...	...	...	...	3	1.9	0.55	0.45	0.42	0.55	0.45	Monghyr.	
	...	0.77	...	...	...	0.07	...	...	...	...	3	1.6	0.94	0.71	0.77	0.94	0.71	Jamui.	
	...	0.10	...	...	...	...	...	...	...	...	Nil	?	Nil	?	Nil	Nil	?	Gugri.	
	...	0.20	0.10	0.04	4	1.8	0.38	0.50	0.20	0.38	0.50	Sheikpura.		South Bhagalpore.
	...	0.20	...	...	0.08	...	...	...	...	...	3	1.7	0.55	0.59	0.26	0.55	0.59	Bhagulpore	
	...	0.18	...	...	...	...	...	...	...	...	1	?	0.18	?	0.18	0.18	?	Bunka.	
	...	0.08	...	...	0.03	0.09	...	...	...	...	3	0.7	0.18	0.19	0.09	0.18	0.19	Kolgong.	
	...	0.12	0.18	3	0.9	0.36	0.35	0.18	0.36	0.35	Rajmehal		Sonthal Per- gunnahs.
	...	0.13	...	...	0.03	0.08	0.01	...	...	...	5	0.5	0.31	0.30	0.13	0.31	0.30	Godda	
	...	0.20	...	...	0.17	0.06	...	...	...	...	4	1.6	0.48	0.55	0.20	0.48	0.55	Pakour.	
	...	0.32	...	...	0.05	0.09	...	...	...	...	4	1.4	0.49	0.43	0.32	0.49	0.43	Nya Doomka.	
	...	0.41	0.15	0.05	3	0.8	0.63	0.45	0.45	0.63	0.45	Droghda.		Hazaribagh ...
	...	0.08	...	...	...	...	...	...	...	...	2	?	0.20	?	0.12	0.20	?	Jamtara.	
	2	?	0.20	?	0.12	0.20	?	Sinra		
	2	?	0.20	?	0.12	0.20	?	Namhat.		
18	0.17	0.09	4	1.4	0.64	0.39	0.20	0.64	0.39	Pachamba		CHUTIA NAGPUR.
	...	0.04	...	...	0.28	0.07	...	...	...	...	8	2.5	1.64	0.55	0.60	1.64	0.55	(Girdi).	
	...	0.46	0.16	...	0.36	...	...	...	...	...	4	0.9	1.42	0.89	0.46	1.42	0.89	Hazaribagh.	
	...	0.10	...	...	0.40	...	...	...	...	...	2	0.7	0.90	0.45	0.50	0.90	0.45	Semtakurah.	
	...	0.50	0.15	3	?	1.41	?	0.78	1.41	?	Mahadi Hills.		Lohardugga
	...	0.08	...	...	0.23	...	...	...	...	...	5	?	2.06	?	0.90	2.06	?	Jhoonrah Hills.	
	...	0.30	...	...	...	...	...	...	...	...	1	?	0.30	?	0.30	0.30	?	Barhi.	
	...	0.40	...	...	...	...	...	...	...	...	1	?	0.40	?	0.40	0.40	?	Chatra.	
	...	0.61	0.21	0.02	6	?	2.60	?	1.40	2.60	?	Karagurha.		Singbhoom.
	...	0.18	...	...	0.21	0.09	...	...	...	...	5	1.8	1.20	0.70	0.44	1.20	0.70	Ramghar.	
	...	0.17	0.50	...	0.35	...	...	...	...	...	5	1.8	1.82	0.77	0.76	1.82	0.77	Lohardugga	
	0.60	0.50	0.10	2	?	1.20	?	0.60	1.20	?	Panauow.	
	...	0.30	0.23	1	?	0.23	?	0.23	0.23	?	Silli.		Manbhoom.
	2	?	1.75	?	0.10	1.75	?	Balumat.		
	...	0.78	...	...	0.14	0.08	...	...	...	...	4	1.7	1.60	0.73	0.78	1.60	0.73	Hoseinabad.	
	...	0.85	...	...	0.18	0.46	...	...	...	...	5	?	2.24	?	0.90	2.24	?	Garwah.	
	...	0.86	0.20	0.33	3	?	1.30	?	0.86	1.30	?	Chyebassa		Singbhoom.
	0.12	0.36	...	...	...	...	3	?	0.62	?	0.36	0.62	?	Chakradhar-		
	...	0.14	...	...	...	...	...	...	...	...	4	1.7	1.23	0.42	0.65	1.23	0.42	pore.	
	...	0.17	...	...	0.28	0.05	...	...	...	...	4	1.3	0.44	0.51	0.15	0.44	0.51	Ghatsila.	
	...	0.12	0.11	0.15	4	?	0.67	?	0.18	0.67	?	Baharagura.		Manbhoom.
	...	0.11	...	...	0.18	0.11	...	...	...	...	4	?	?	?	?	?	?	Purulia	
	0.61	0.60	...	...	...	...	2	?	1.21	?	0.61	1.21	?	Gobindpore.		
	...	0.25	...	...	0.19	0.24	...	...	...	...	4	?	0.81	?	0.25	0.81	?	Raghunath-	
	2	?	?	?	?	?	?	pore.		Manbhoom.
	2	?	?	?	?	?	?	Barrabhoom.		
	2	?	?	?	?	?	?	Jhalsa.		
	4	?	?	?	?	?	?	Chas.		

**SUMMARY OF THE METEOROLOGICAL AND RAINFALL OBSERVATIONS
TAKEN IN BENGAL, AND OF THE METEOROLOGICAL OBSERVATIONS
TAKEN IN ASSAM, FOR THE MONTH OF JANUARY 1888.**

THE normal meteorology of January is very similar to that of the two previous cold-weather months, except that in this month the north-east monsoon conditions are, if anything, more strongly developed than in the earlier part of the season. Temperatures continue low throughout the month, there being a considerable difference between the day and night temperatures, the latter being frequently very low. Fairly strong northerly winds, with practically cloudless skies, prevail, though sometimes towards the end of January southerly winds set in at the stations on the sea coast in the south of the province. Pressure is also usually high throughout the month, and humidity is moderate. Under these normal conditions rainfall is practically absent from the whole province, but from time to time the normal conditions are liable to be almost entirely reversed by the formation or appearance of barometric depressions over Northern India, which subsequently drift in a southerly or south-easterly direction through Central India and the North Western Provinces, and may even pass over Bengal. These disturbances give southerly and south-easterly winds in Bengal, with heavily clouded skies and damp rainy weather, the day temperature during such times becoming very low, but the minimum or night temperatures rise very rapidly. During the occurrence and passage of these depressions or feeble storms, therefore, weather conditions in Bengal became almost entirely reversed, and these disturbed conditions may last perhaps three or four days at a time.

The average rainfall of January in Bengal is very small, and is entirely brought up by the disturbed conditions just referred to. The rainfall is in most districts only equal to about half an inch while the largest variations are from a fall of 0.52 inch in Orissa to one of 0.61 inch in Behar.

Meteorology of the month.—The chief features in the meteorology of January 1888 have been—

1. Pressure has been decidedly in excess over the whole of the Province of Bengal, the excess averaging about 0.033 inch, the distribution of the excess being fairly equal in different districts. In Assam pressure has been almost normal.
2. Temperature has been decidedly below the normal over the whole of Bengal the mean temperature being in defect by 1.3°. In Assam, on the other hand, temperature has been almost normal.
3. Humidity has been decidedly below the normal at almost all stations.
4. Cloud proportion has been decidedly larger than usual at almost every station in Bengal and Assam.
5. At the latter end of the month a very well marked and influential barometric depression travelled from near Quetta through Central India, and passed through the south of the province entering the Bay of Bengal near Gopalpore, and crossing it to near Akyab, where it again passed inland or disappeared.
6. Comparatively heavy rainfall has been received over Chutia Nagpur, South Behar, Orissa, South-West and East Bengal, and light rain in North Bengal and North Behar.

The only point of interest in the meteorology of the early part of January was the formation of a cyclonic storm in the Arabian Sea, which travelled in a northerly direction up the Bombay coast, and which reached Bombay about the 4th or 5th of the month. The existence of this storm apparently accounted for the partial reversal of the north-east monsoon or cold-weather conditions which took place in Chutia Nagpur and South Behar, and over parts of Bengal from about the 4th to the 6th of the month, during which time moderate rainfall fell over Chutia Nagpur and South Behar. From this time, up till about the 20th of the month, there were no changes of any practical importance, and fine settled weather obtained for the greater part of the time; but from this date the settled conditions commenced to change. On the 20th the weather conditions over the whole of India were fairly normal except that a large low pressure area was appearing, the centre of which was south of Quetta and west of Jacobabad. On the 21st the area of low pressure moved to the east-south-eastward, and a large diffused depression existed over Sind, Guzerat, Central India and the Berars. On the 22nd the depression concentrated and became rather more local, and the centre appeared to the west of Ajmere and Jeypore. On the 23rd the depression travelled slowly south-eastward, and the centre was near Seoni in the Central Provinces, while on the 24th it had advanced to near Raipur. On the 25th and 26th the depression continued its east-south-easterly advance, and on the 27th it was near Gopalpur, and it subsequently entered the Bay of Bengal, crossing it apparently in an almost due easterly direction, and on the 29th it was approaching the east coast of the Bay, and its centre was not far from Akyab, while on the 30th it had apparently passed inland into Upper Burma, or perhaps had broken up, and the depression ceased to exert any further influence on the meteorology of India. This important storm, though only of decidedly feeble nature, had therefore a life history of at least ten days, and it certainly travelled over a distance of practically two thousand miles, if not considerably further.

This depression or feeble storm naturally very materially influenced the weather in Bengal, and the usual north-east monsoon conditions became almost entirely reversed. The reversal of the conditions commenced in the western and northern districts, and gradually spread over the eastern and south-eastern. Thus from about the 22nd, skies clouded over

and rain commenced to fall in South Behar and Chutia Nagpur; these conditions extended to parts of South-West Bengal on the 23rd, and on the 26th and 27th disturbed conditions existed over the whole province, and moderate to heavy rain became general in all districts. At this time the depression was lying over Orissa, and the whole province was influenced by it. At the same time the northerly wind current which had been previously blowing over Bengal became almost reversed, and light southerly winds were reported in many instances. Humidity also rose very rapidly, while the night temperatures increased, though the day temperatures still remained low. With the continued south-easterly or easterly movement of the depression, the area of rainfall moved to the eastward, and on the 28th rain fell pretty generally in East Bengal and at the stations in and near the hills of North Bengal, while a few showers fell in Orissa; but after this date skies cleared rapidly, temperature and humidity decreased, and pressure rose very generally, while a strong and very cold northerly current flowed over Bengal, the air currents at this time being of a particularly low temperature, owing apparently to the cooling effect of the accumulation of snow on the hills, and to the heavy rainfall over Upper India. The snowfall in the hills, due to this storm, appears to have been very heavy, and several stations reported falls of snow several days in succession. At the close of the month therefore the cold-weather conditions were present over Bengal and Assam in a well marked manner.

Pressure.—The variations of pressure during the month have been rather large; during the first week pressure was above the normal by 0.072 inch; in the second week this excess had fallen to 0.05 inch, while in the third week a rapid fall had taken place, and pressure became 0.014 inch in defect. A slight recovery took place towards the end of the month, and for the last week pressure was again in excess by 0.02 inch. For the whole month, taking into consideration only those stations from which observations have been received for a series of years, and which therefore yield reliable averages, the mean pressure of the province of Bengal has been 0.033 inch in excess of the normal. The largest excess registered is one of 0.016 inch at Berhampore. In Assam the variations of the mean pressure from the normal have been very small, the largest being an excess of 0.01 inch at Sibsangor, while the average pressure of all the stations has only been 0.005 in excess.

Temperature.—The variations of temperature have also been large, particularly towards the end of the month, and at some stations the day temperature for the last week averaged 8° and 9° below the normal. As during the earlier part of the month temperature had been in certain cases rather considerably above the normal, the mean variation for the whole month is comparatively small, and temperature in Bengal has generally been 1.5 in defect. The largest defect has been in Chutia Nagpur, where it has averaged nearly 3°. In Assam, on the other hand, the variation of temperature from the normal has been a defect of only 0.3°.

The actual variations and oscillations of temperature for the month are best shown in the following table, where the average maximum, minimum and mean temperatures at nine typical stations in different districts of the province are given week by week, and compared with the normal values for the same periods. Speaking broadly, it may be said that temperature was very considerably above the normal during the first week, slightly below it in the second, that the defect had increased somewhat in the third, while in the fourth week the variations below the normal were very large, particularly in the maximum or day temperatures.

Monthly variation table of temperature from the weekly comparison table during January 1888.

	WEEK ENDING 6TH JANUARY 1888			WEEK ENDING 13TH JANUARY 1888			WEEK ENDING 20TH JANUARY 1888			WEEK ENDING 27TH JANUARY 1888		
	Variation of actual mean maximum temperature of week from the normal mean.	Variation of actual mean minimum temperature of week from the normal mean.	Variation of actual mean daily temperature of week from the normal mean.	Variation of actual mean maximum temperature of week from the normal mean.	Variation of actual mean minimum temperature of week from the normal mean.	Variation of actual mean daily temperature of week from the normal mean.	Variation of actual mean maximum temperature of week from the normal mean.	Variation of actual mean minimum temperature of week from the normal mean.	Variation of actual mean daily temperature of week from the normal mean.	Variation of actual mean maximum temperature of week from the normal mean.	Variation of actual mean minimum temperature of week from the normal mean.	Variation of actual mean daily temperature of week from the normal mean.
Cuttack	+0.4	-0.6	+1.5	-2.0	-2.3	-2.2	+0.2	-1.3	-1.0	-1.9	+1.1	-0.4
Calcutta (Alipuri).	-0.7	+4.2	+1.8	-0.4	-1.0	-0.7	-0.5	-2.8	1.5	-1	-1.1	3.6
Dacca	-0.7	+1.2	-0.3	+2.2	+1.6	+1.6	-1.1	-1.0	1.1	-1.7	-0.3	-2.3
Burdwan	0	+1.8	+2.4	-0.5	-1.2	-0.9	1.1	-2.3	-0.1	1.1	-1.8	3.0
Patna (Bankipour).	-2.0	+3.6	+0.8	+1.7	+0.1	+0.9	+0.1	-0.6	-0.2	1.0	-0.1	-3.4
Gya	+1.6	+3.9	+2.1	-0.9	-2.1	-1.5	0	+0.6	+0.2	-8.1	1.9	-5.0
Furness	-8.6	+0.0	-1.4	-0.4	-2.1	-1.3	-1.4	-1.0	-2.1	-7.3	0	-8.6
Hazaribagh	-8.2	+5.1	+1.0	-3.8	-2.1	-2.9	-1.0	1.6	-1.1	8.3	-1.6	-5.0
Darjeeling	-0.2	+0.2	-0.1	+3.7	+1.1	+2.4	-1.2	-2.9	-2.2	-4.5	-1.0	-2.8

Rainfall.—Has been heaviest in Orissa, the stations of which average about one and a third inches, which is about four times the normal fall; East Bengal and Chutia Nagpur have each received an average of about one and a quarter inches, or rather more than twice the normal fall. In South-West Bengal and South Behar the rainfall has averaged nearly an inch, or about twice the usual amount, but in North Bengal and North Behar the falls have

been smaller than usual; in North Behar the fall has been less than half an inch, or about four-fifths of the normal, while North Bengal has received on the average less than a quarter of an inch, or about half the normal fall. The rainfall during the month has been very well distributed and very general, and except at a few stations in North Bengal, all stations in the province report fairly good rain.

The following table gives the summary of the temperature and rainfall data of each of the seven Meteorological Divisions of the province for the month of January 1888:—

METEOROLOGICAL DIVISIONS	TEMPERATURE						RAINFALL							
	Highest observed during month	Lowest observed during month	Averages for month			Average mean of month above or below normal mean of month	Of month			Rainy days			Since 15th May 1887	
			Of highest of each day	Of lowest of each day	Of mean for each day		Average	Normal average	Variation	Average number in month	Normal average number in month	Variation	Average	Normal average
Orissa	87.4	4	78.9	59.4	69.2	-0.6	1.31	0.32	+0.99	23	0	+14	44.73	54.25
South-West Bengal	83.3	43.9	75.1	54.0	64.6	-1.4	0.87	0.42	+0.45	25	11	+14	47.38	52.25
East Bengal	83.4	42.0	75.6	52.7	64.2	-0.3	1.29	0.50	+0.79	17	13	+0.4	56.79	75.59
North Bengal	79.4	39.9	73.8	49.6	61.7	-0.4	0.23	6.44	-0.21	20	11	+0.9	73.83	70.07
North Behar	77.7	40.1	70.5	48.2	59.4	-1.8	0.48	0.61	-0.13	22	14	+0.8	52.55	48.50
South Behar	78.5	42.0	71.0	49.5	60.3	-1.8	0.83	0.53	+0.30	33	16	+1.7	42.68	44.05
Chutia Nagpur	74.4*	42.9*	58.4*	49.1*	58.8*	-2.7*	1.22	0.52	+0.70	44	15	+2.9	45.78	49.44
Assam	83.4	43.7	73.0	61.2	62.1	-0.3								

* Chyebassa not included

METEOROLOGICAL OFFICE, BENGAL.

The 16th February 1888.

ALEXANDER PEDLER,

Offg. Meteorological Reporter to the Govt. of Bengal.

Results of the Meteorological Observations taken at the Alipore Observatory from
12th to 18th February 1888

Month.	Date.	Maximum in sun	Number of hours of bright sunshine	Mean pressure barometer at 32° Fahr.	TEMPERATURE				HYGROMETRY.				WIND		Rain	WEATHER.
					Mean	Maximum	Range	Minimum	Mean wet bulb.	Vapour tension.	Dew point.	Humidity	Prevailing direction	Miles recorded.		
1888.		°		Inches	°	°	°	°	°	Inches	°	%			Inches	
Feb.	12th	137.4	8.9	29.919	67.5	78.0	21.2	56.8	62.6	0.505	59.2	76	SSL and SSW	102	Nil	Chiefly clear
"	13th	138.0	3.5	909	69.5	78.8	16.3	62.5	66.7	622	65.2	86	SSW calm and variable	36	"	Chiefly cloudy, P.
"	14th	136.5	4.6	891	70.8	77.6	12.7	61.9	68.0	652	66.5	87	SE by S and variable	5	Not measured	Chiefly cloudy, P.
"	15th	136.3	9.7	851	72.3	81.6	16.2	65.1	67.6	614	64.8	79	SW by S and SW by W	12	Nil	Chiefly clear, P.
"	16th	131.7	10.2	886	70.4	78.5	16.3	62.2	62.1	453	56.2	63	N and calm	43	"	Chiefly clear, P.
"	17th	135.5	10.7	868	69.2	79.7	20.1	59.4	60.0	396	52.5	58	N and WSW	75	"	Clear, P.
"	18th	134.8	9.6	898	71.0	81.5	17.2	61.3	65.2	548	61.5	78	SSW and NNW	83	"	Chiefly clear, P.

The mean pressure of the seven days ... 29.893
The average pressure of the corresponding period for 24 years, S. G.'s Office ... 29.919

The total number of hours of bright sunshine ... 57.5
The maximum possible number of hours of sunshine ... 79.5

The mean temperature of the seven days ... 70.1
The average temperature of the corresponding period for 24 years, S. G.'s Office ... 72.9
The extreme variation of temperature ... 21.8
The maximum temperature ... 81.6

The highest velocity of the wind in one hour ... 12
The highest pressure of wind on one square foot ... Not measurable.

The mean relative humidity ... 75
The average relative humidity of the corresponding period for 24 years, S. G.'s Office ... 67

The total fall of rain from 12th to 18th February 1888 ... Nil
The average fall of the corresponding period for 24 years, S. G.'s Office ... 0.24
The total fall from 1st January to 18th February 1888 ... 2.52
The average fall of the corresponding period for 24 years, S. G.'s Office ... 1.15

The mean pressure, temperature, &c., are deduced from the traces of the Barograph and Thermograph.

The maximum and minimum temperatures are obtained from self-registering thermometers. All the thermometers are verified, and the readings have been corrected to a standard constructed and verified at the Kew Observatory. They are exposed under a thatched shed open at the sides, and are suspended four feet above the ground.

The barometer readings are corrected approximately to those of the standard Newman's No. 86, formerly at the Surveyor-General's Office.

The hygrometric elements are obtained from Tables III, IV, and V of the official tables computed in the Meteorological Office, and based on Regnault's modifications of August's formula.

The directions and the movement of the wind are taken from the trace of a Beckley's anemograph.

The mouth of the rain-gauge is one foot above the ground.

o overcast, g gloomy, t thunder, d drizzling rain, r lightning, reflection, Δ dew, fog.

N.B.—In the weekly report from 5th to 11th February 1888, read 0.11 inches for 1.11 inches as the rainfall of 10th February 1888.

A. PEDLER,

For Offg. Meteorological Reporter to the Govt. of India.

Meteorological Report of the Province of Bengal

METEOROLOGICAL DIVISION.	DISTRICT.	Representative station.	STATION OBSERVATIONS.													
			AIR PRESSURE.			WIND.		TEMPERATURE.								
			Mean barometric height, 10 A.M.	Mean reduced to sea-level.	Variation from mean.	Prevailing direction.	Mean wind velocity.	Highest during week.	Date.	Lowest during week.	Date.	N. in minimum temperature.	Mean minimum temperature of week.	Mean daily temperature of week.	Variation from normal mean of week.	Mean 10 A.M. temperature.
ORISSA.	Pooree	Gopalpore	29.924	29.974	-0.050	SSE	300	84.2	13th Feb.	65.4	11th, 12th Feb.	81.8	72.1	77.0	+3.0	80.4
	False Point	False Point	29.905	29.987	-0.070	SSW	219	82.4	16th "	59.0	11th "	80.0	69.0	74.5	+0.9	77.2
	Cuttack	Cuttack	29.908	29.991	-0.080	Calm	27	89.4	15th "	60.3	11th "	84.8	68.2	76.4	-0.8	78.3
	Balasore	Balasore	29.932	29.992	-0.072	NNE	90.7	83.4	16th "	52.6	11th "	80.0	61.0	70.8	+0.8	73.6
	South-West Midnapore	Saugor Island	29.972	29.999	-0.027	SSE	175	81.2	16th "	57.4	11th "	77.7	65.5	71.6	-1.4	73.3
MIDDLE WEST BENGAL.	South 24-Pergunnahs	Midnapore	29.855	29.910	-0.055	N	68.6	84.3	16th "	53.7	11th "	80.2	6.2	70.7	+2.5	73.7
	24-Pergunnahs	Calcutta	29.971	29.993	-0.022	N	69	81.5	16th "	53.3	11th "	77.5	60.6	69.0	-1.3	71.9
	Howrah	Howrah	29.988	29.992	-0.004	Variable	48.3	81.5	16th "	52.8	11th "	80.2	59.5	69.0	+0.1	71.0
	Burdwan	Burdwan	29.981	—	—	NW, calm	43	80.1	16th "	56.3	11th "	76.4	60.6	68.5	—	70.8
	Bankoora	Bankoora	29.948	29.967	-0.019	SW	70.3	84.7	16th "	55.8	11th "	80.2	58.8	69.5	+2.5	71.9
	Beerbhoom	Raneegunge	29.927	29.996	-0.069	SSW	50.3	83.6	16th "	53.2	11th "	78.8	57.8	68.3	-0.7	70.0
	West Burdwan	Berhampore	29.908	29.976	-0.068	WNW	51.3	84.2	16th "	50.9	11th "	79.5	57.5	68.7	—	71.9
	Moorshedabad	Krishnagar	29.966	30.001	-0.035	Calm	60.7	83.2	16th "	51.5	11th "	79.0	58.9	69.0	-0.5	70.9
	Nuddea	Jessore	29.920	30.015	-0.095	Easterly	58	83.1	17th "	53.2	11th, 12th Feb.	75.5	58.9	67.4	-2.6	71.5
	Chittagong	Chittagong	29.986	29.998	-0.012	Northerly	64.2	81.3	16th "	55.1	11th, 12th Feb.	76.0	61.1	68.6	+2.3	71.0
EAST BENGAL.	Chittagong Hill Tracts	Demakiri	29.965	30.010	-0.045	Calm, SSE	63.2	81.3	17th "	49.8	11th "	76.6	58.1	67.3	+1.7	73.2
	Backergunge	Noakholly	29.969	30.010	-0.041	S	67	80.5	16th "	53.0	11th "	74.8	57.6	68.2	+0.6	68.8
	Furreedpore	Furreedpore	29.983	30.006	-0.023	SSW	79	81.1	16th, 17th Feb.	52.7	11th "	77.1	58.5	67.8	-2.0	70.5
	Dacca	Commillah	29.976	30.013	-0.037	SE	69.6	81.4	16th, 17th Feb.	51.1	12th "	77.0	58.5	67.9	+1.7	69.8
	Commillah	Mymensingh	29.946	30.007	-0.061	ESE	70.1	79.7	16th "	51.8	17th "	74.7	56.2	65.5	+3.2	65.0
	Mymensingh	Bogra	29.989	29.995	-0.006	W, calm	57.1	82.5	16th "	51.1	17th "	77.6	54.9	66.2	—	68.1
	Bogra	Sernagunge	29.983	29.981	+0.002	S	64.3	81.1	16th "	51.1	11th, 12th, 17th Feb.	76.4	54.3	65.4	+0.7	68.6
	Pubna	Rampore Beaulah	29.927	29.995	-0.068	South-westerly	55.9	81.2	16th "	49.7	17th "	76.6	55.0	65.8	+3.2	72.1
	Rajshahye	Maldah	29.902	—	—	NW	63.9	82.3	16th "	48.6	13th "	80.3	52.4	66.3	—	72.1
	Maldah	Dinapore	29.847	29.971	-0.124	Out of order.	02	82.1	16th "	46.3	16th "	78.2	50.4	64.3	+2.0	72.3
NORTH BENGAL.	Dinapore	Rungpore	29.864	29.904	-0.040	SE, SW	90	80.6	16th "	48.1	13th "	76.6	52.0	64.3	+3.6	66.7
	Rungpore	Julpigoree	29.693	29.985	-0.292	Easterly	30.1	79.4	16th "	47.4	16th "	73.7	50.5	63.1	+0.6	63.4
	Julpigoree	Cooch Behar	22.809	—	—	Calm	165	46.9	15th "	25.7	13th "	42.7	30.6	36.7	-2.8	39.0
	Cooch Behar	Darjeeling Hill Tracts	29.859	29.991	-0.132	Westerly	60.0	80.2	16th "	44.9	12th "	76.3	49.5	62.9	-1.8	68.7
	Darjeeling Hill Tracts	Purneah	29.808	29.984	-0.176	WSW	116	75.9	16th "	52.6	16th "	73.1	54.9	63.5	-0.1	64.6
	Purneah	Mozufferpore	29.723	29.958	-0.235	WSW	175.3	79.0	16th "	43.9	17th "	76.0	47.1	61.6	+1.4	69.0
	Mozufferpore	Durbhunga	29.789	29.992	-0.203	W	120.5	80.5	15th "	46.0	12th "	77.1	52.4	64.8	+1.7	68.3
	Durbhunga	Chumpran	29.618	29.987	-0.369	WSW	141.4	81.5	15th "	55.0	11th, 13th Feb.	73.9	57.1	65.0	0	69.4
	Chumpran	Shahabad	29.750	30.001	-0.251	WNW	112.0	81.9	16th "	46.9	16th "	77.9	52.0	65.0	+1.3	70.1
	Shahabad	Arrah	29.766	29.971	-0.205	W	74.4	80.3	16th "	48.4	16th "	76.4	51.6	64.0	+0.7	68.8
SOUTH BENGAL.	Arrah	Gya	29.674	29.967	-0.293	Variable	70.7	82.6	16th "	51.8	11th "	79.4	46.5	68.0	-0.3	70.3
	Gya	Patna	29.796	29.987	-0.191	Westerly	78.4	80.3	16th "	50.8	16th "	76.6	52.7	64.7	+0.3	70.1
	Patna	South Bhagulpore	29.819	29.986	-0.167	W, NW	68	80.4	16th, 16th Feb.	50.0	16th "	77.3	53.3	65.3	+3.4	71.3
	South Bhagulpore	Monghyr	29.466	—	—	WSW, NW, South-westerly.	153.0	84.3	16th "	51.8	17th "	79.8	55.0	67.4	+1.5	71.1
	Monghyr	Southal Pergunnahs	27.632	29.980	-0.348	NW	108.3	78.4	15th "	50.3	11th "	74.6	53.5	64.0	-1.5	68.1
	Southal Pergunnahs	Hazratibagh	27.740	29.913	-0.173	NW	87.7	78.1	16th "	44.9	11th "	78.5	53.1	63.3	-1.3	67.8
	Hazratibagh	Lohardugga	29.192	—	—	Southerly	21.8	82.6	16th "	63.5	11th "	79.3	59.3	69.5	+0.9	73.9
	Lohardugga	Manbhoom	—	—	—	—	—	—	—	—	—	—	—	—	—	—
	Manbhoom	Singbhoom	—	—	—	—	—	—	—	—	—	—	—	—	—	—
	Singbhoom	Chyabassa	—	—	—	—	—	—	—	—	—	—	—	—	—	—

Mean minimum temperature.—Summary.—The normal means of air pressure and temperature are the arithmetical average or means of the readings during the season, 1887-88. The humidity of the atmosphere is expressed as percentage, saturated air being represented by 100. A clear sky is denoted by 0 and an overcast sky by 100. The numerical means or average of the rainfall in that district determined from the returns sent in by the sub-divisional stations for the period 1887-88. The mean of the rain in the district is the sum of the rainfall in returns divided by the number of stations. A rainy day is one on which at least hundredth of an inch fell.

the week ending Friday, the 17th of February 1888.

at 10 A.M.	DISTRICT OBSERVATIONS.														Representative station.	DISTRICT.	METEOROLOGICAL DIVISION.						
	Average cloud amount at 10 A.M. for week.	Rainfall of week at observing station.	OF WEEK.		RAINFALL.																		
					Since 1st of Month.			Since 15th May 1887.			Average number of rainy days.	Normal number of rainy days.											
					Mean for district.	Normal mean.	Variation.	Mean for district.	Normal mean.	Variation.													
70	1'0	1'10	—	—	—	—	—	—	—	—	—	—	—	—	Gopalpore	...	ORISSA.						
73	5'7	0'80	0'34	0'58	57'08	0'7	False Point	Pooree		...					
70	4'7	0'17	0'32	0'59	53'24	0'7	Cuttack	Cuttack		...					
65	4'0	1'43	0'23	0'63	54'73	0'6	Balasore	Balasore		...					
68	5'3	1'35	1'26	0'32	3'46	0'97	+2'49	62'60	63'53	-0'93	2'3	0'6	Saugor Island	South-West Midnapore	...	SOUTH-WEST BENGAL.					
50	2'6	0'27	0'10	0'18	1'65	0'67	+0'98	52'98	52'25	+0'73	1'0	0'6	Midnapore	...	...	South 24-Pergunnahs	...				
3	3'0	Nil	0'05	0'37	1'60	0'95	+0'64	43'21	53'26	-10'05	0'6	0'9	Calcutta	...	...	24-Pergunnahs	...				
50	3'6	0'03	0'01	0'37	0'98	0'85	+0'13	47'25	47'56	-0'31	0'3	0'7	Burdwan	...	...	Howrah	...				
38	1'1	Nil	Nil	0'29	0'86	0'43	+0'43	51'45	52'84	-1'39	0'0	0'7	Bankoora	Hooghly	...	EAST BENGAL.					
16	1'7	drops	Nil	0'48	0'70	0'88	-0'18	48'74	53'34	-4'60	0'0	0'6	Raneegunge	...	...	Beerbhoom	...				
31	4'4	0'51	0'51	0'35	0'92	0'68	+0'30	60'12	50'52	+9'60	0'5	0'7	Berhampore	...	...	West Burdwan	...				
24	3'7	Nil	0'44	0'43	1'10	0'89	+0'21	44'45	50'37	-5'92	0'8	0'6	Krishnaghar	...	...	Moorsheadabad	...				
14	4'3	Nil	0'17	0'39	0'01	0'85	+0'06	43'42	54'79	-11'37	0'8	0'6	Jessore	Nuddoa	...	NORTH BENGAL.					
16	5'0	0'16	0'25	0'55	115'21	0'4	Chittagong	...	...	...	...	...	Chittagong	...	...	Khoolna	...
10	4'9	0'73	0'58	0'37	1'01	0'79	+0'22	62'30	79'08	-16'78	1'0	0'8	Demagiri	...	...	Chittagong Hill Tracts	...				
36	5'3	0'17	0'20	0'40	0'40	0'85	-0'45	74'79	110'63	-35'84	1'5	0'8	Barrisal	...	...	Backergunge	...				
16	1'7	0'58	0'53	0'40	1'11	0'82	+0'29	37'73	57'24	-19'51	1'3	0'5	Noakholly	Noakholly	...	NORTH BENGAL.					
18	2'7	0'88	1'29	0'37	1'67	0'83	+0'84	42'58	62'00	-19'41	2'5	0'8	Furzedpore	...	...	Furzedpore	...				
2	4'0	0'81	0'73	0'41	1'27	0'73	+0'54	44'45	72'22	-27'77	1'8	0'8	Dacca	...	...	Dacca	...				
2	6'0	0'13	0'40	0'49	0'84	0'81	+0'03	61'48	68'49	-7'01	1'2	0'7	Commillah	...	...	Commillah	...				
39	5'7	Nil	0'05	0'55	0'43	0'77	-0'34	60'96	57'93	+3'03	0'5	0'7	Mymensingh	Mymensingh	...	NORTH BENGAL.					
10	4'7	1'20	1'00	0'49	1'60	0'82	+0'87	45'92	54'77	-8'85	1'5	0'6	Bogra	...	...	Bogra	...				
32	0	Nil	0'33	0'37	1'13	0'77	+0'36	50'75	54'95	-4'20	0'5	0'5	Serajkunge	...	...	Pubna	...				
32	2'1	Nil	Nil	0'31	0'17	0'54	-0'37	46'85	55'41	-8'56	0'0	0'3	Rampore Beaulah	...	...	Rajshahye	...				
13	1'0	Nil	Nil	0'29	0'24	0'39	-0'15	69'39	56'56	+12'83	0'0	0'8	Maldah	Maldah	...	NORTH BENGAL.					
16	1'0	Nil	Nil	0'27	0'13	0'37	-0'24	81'00	73'81	+7'28	0'0	0'7	Dinapore	...	...	Dinapore	...				
16	2'1	Nil	Nil	0'23	0'10	0'27	-0'17	118'03	110'88	+7'15	0'0	0'6	Rungpore	...	...	Rungpore	...				
30	8'9	0'04	0'03	0'19	0'63	0'35	+0'28	118'83	121'58	-2'75	0'5	0'9	Julpigoree	...	...	Julpigoree	...				
51	1'6	Nil	Nil	0'30	0'05	0'48	-0'43	65'36	58'54	+6'82	0'0	0'6	Darjeeling	Cooch Behar	...	NORTH BENGAL.					
81	2'4	Nil	Nil	0'21	Nil	0'40	-0'40	50'07	44'79	+5'28	0'0	0'6	Purneah	...	...	Purneah	...				
44	3'4	Nil	Nil	0'16	Nil	0'36	-0'36	49'82	46'89	+2'93	0'0	0'5	Mozufferpore	...	...	North Bhagulpore	...				
36	1'0	Nil	Nil	0'24	Nil	0'38	-0'38	40'25	43'54	-3'29	0'0	0'6	Durbhunga	...	...	Durbhunga	...				
43	1'4	Nil	Nil	0'12	0'01	0'41	-0'40	38'63	40'78	-2'10	0'0	0'5	Motihari	Chumparun	...	NORTH BENGAL.					
39	2'4	Nil	Nil	0'12	0'01	0'41	-0'40	38'63	40'78	-2'10	0'0	0'5	Chupra	...	...	Sarun	...				
45	1'7	Nil	Nil	0'13	0'01	0'41	-0'40	39'30	42'12	-2'82	0'0	0'5	Dehree	...	...	Shahabad	...				
44	3'6	Nil	Nil	0'13	0'01	0'41	-0'40	39'30	42'12	-2'82	0'0	0'5	Buxar	...	...	Arrah	...				
48	2'0	Nil	Nil	0'16	Nil	0'39	-0'39	36'81	41'93	-5'12	0'0	0'5	Gya	Gya	...	SOUTH BENGAL.					
40	1'1	Nil	Nil	0'23	0'04	0'47	-0'43	43'90	48'08	-0'08	0'0	0'5	Bankipore	...	...	Patna	...				
41	0'4	Nil	Nil	0'17	0'08	0'43	-0'17	53'16	50'98	+2'18	0'0	0'5	Bhagulpore	...	...	South Bhagulpore	...				
34	3'8	Nil	Nil	0'25	0'08	0'47	-0'09	47'51	51'11	-3'30	0'0	0'7	Monghyr	...	...	Monghyr	...				
37	2'7	Nil	0'31	0'35	0'74	0'76	-0'02	46'27	48'20	-1'93	0'3	0'7	Doomka	Sonthal Pergunnahs	...	CHOTA NAGPUR.					
37	2'7	Nil	0'31	0'35	0'74	0'76	-0'02	46'27	48'20	-1'93	0'3	0'7	Hazaribagh	...	...	Hazaribagh	...				
37	2'7	Nil	0'31	0'35	0'74	0'76	-0'02	46'27	48'20	-1'93	0'3	0'7	Ranch	...	...	Lehardugga	...				
37	2'7	0'14	0'03	0'22	1'78	0'79	+1'03	53'03	52'90	+0'83	1'0	0'6	Chyebassa	...	...	Manbhoom	...				
37	2'7	0'14	0'03	0'22	1'78	0'79	+1'03	53'03	52'90	+0'83	1'0	0'6	Chyebassa	...	...	Singbhoom	...				

The variations are negative when the mean for the week is less than the corresponding normal mean, and positive when greater.
 The normal mean represents the part of the sky covered, the whole sky being denoted by 10. Under the head District observations of rainfall the normal mean is the mean of the district, and the corresponding average of the rainfall return received in the district, i.e., from the total rainfall at the sub-divisional stations.

Statement of Rainfall in Bengal for the week ending Friday (6 p.m.), the 17th of February 1888.

Meteorological division.	District.	Station.	RAINFALL.						TOTAL.		Total rain fall since 1st of month.	Average total rain fall from 1st of month.	Total rain fall since 15th May 1887.	Average rain fall from 1st of May to date.	
			Saturday 11th February.	Sunday 12th February.	Monday 13th February.	Tuesday 14th February.	Wednesday 15th February.	Thursday 16th February.	Friday 17th February.	Number of rain days.					Rainfall of week.
ORISSA.	Pooree	Pooree			0.08		0.12	1.03	0.43	4	1.6	1.89	0.63	36.49	52
		Khordah			0.07		0.06	0.09		3	0.20	0.20	0.47	30.59	87
		Bampur			0.11		0.14	0.10					0.44	82	87
		False Point		0.24									0.54	70.01	68
		Gop	0.00				0.10	0.37		4	0.80	1.40	0.54		
	Cuttack	Juchisingpore		0.81											
		Banks		0.18									0.40		48
		Cuttack		0.11									0.51		53
		Kudrapana		1.57				0.30		2	1.57	2.40	0.54	58.03	57
		Jali re				0.08		0.30		Nil	0.8	1.72	0.83	5.08	53
	Balasore	Dharmavilla								Nil	Nil	Nil		44.49	
		Salipore								Nil	Nil	Nil		51.31	
		Chandbali													
		Bhuddineek			0.47	0.03		0.23		3	0.79	2.86	0.76	47.09	54
		Sunh											0.40		82
SOUTH-WEST BENGAL.	Midnapore	Balasore			1	0.27						0.77		55.0	
		Jalibore		0.01	0.08	0.22				5	0.50	0.87	0.66	40.19	59
		Baripodab			0.00	0.40				2	0.40	0.42	0.37	4.05	50
		Conrai			0.41	0.71	0.08			3	1.19	3.40	0.76	52.58	61
		Saugor Island			0.48	0.83		0.04		1	1.15	2.97	0.87	71.81	78
	24-Pergunnahs	Tumuck								Nil	Nil	10	0.88	5.79	81
		Midnapore		0.01		0.22				2	0.26	0.82	0.71	18.92	49
		Chittal		0.01						1	0.01	1.0	0.48	87.25	54
		Kukshaty				1.49				1	1.42	4.74		57.40	
		Haria				1.71				1	1.50	5.1		43.07	
	Howrah	Bhagwanpore			0.10	0.29				2	1.11	3.15		45.7	
		Garbeta								Nil	Nil	1.17		51.51	
		Diamond Har					1.94			1	1.94	3.00	0.28	61.95	69
		Canning Isen					2.04			1	2.01	3.15		83.08	
		Alipore Jail					0.03			1	0.13	1.71	0.1	54.55	70
Hoochly	Barakpore								Nil	Nil	1.3	0.1	42.50	50	
	Dum Dum								Nil	Nil	1.74	0.82	43.03	51	
	Barasat			0.08					1	0.08	3.21	0.98	41.84	51	
	Busehat			0.10					1	0.10	1.37	0.79	53.18	54	
	Howrah					0.12			Nil	Nil	1.14	0.76	30.75	5.25	
Burdwan	M. Hesteka								1	0.10	1.63	0.92	41.03	54	
	(Ooluberiah)														
	Scramptore		0.00		0.01				2	0.00	1.98	1.08	30.41	57	
	Hoochly								Nil	Nil	1.13	1.13	41.09	49	
	Jehanabad								Nil	Nil	1.05	1.11	37.38	53	
Bankoora	Culina				0.10				1	0.10	1.05	0.0	59.8	45	
	Burdwan			0.11					1	0.01	1.11	0.76	47.29	48	
	Culina								Nil	Nil	0.88	1.09	5.44	48	
	Ranggunge								Nil	Nil	0.97	1.09	47.08	50	
	Manikur								Nil	Nil	0.82		43.62		
Beerbhoom	Bankoora								Nil	Nil	0.88	0.08	45.37	52	
	Bahupore								Nil	Nil	1.00	0.56	57.02	51	
	Mahara								Nil	Nil	0.70	0.11	50.5	50	
	Khatra								Nil	Nil	0.80	0.17	58.12	57	
	Indra								Nil	Nil	0.11		41.84		
Nuddia	Katnapore								Nil	Nil	1.01		46.10		
	Anda								Nil	Nil	0.70		53.44		
	Gangajalghat								Nil	Nil	0.68		50.41		
	Rangajalghat								Nil	Nil	0.68		50.41		
	Sonamukhi								Nil	Nil	1.13		53.03		
Khoolna	Nil								Nil	Nil	0.94		57.31		
	Bl Soory								Nil	Nil		0.75	50.58	55	
	Hetanpore								Nil	Nil	0.1	0.91	51.87	55	
	Rampore								Nil	Nil	0.56	0.68	45.40	51	
	Butpore								Nil	Nil	0.67		42.45		
Jessor	Rangghat				0.02	0.52			1	0.54	1.12	0.78	41.05	46	
	Krishnaghat						0.74		Nil	Nil	0.65	0.88	43.81	46	
	Chandanga								1	0.2	1.2	0.90	43.44	47	
	Mohitpur			0.17					1	0.17	0.87	0.92	48.94	48	
	Kaushal			0.78					1	0.78	1.47	0.94	44.99	45	
Moorshedabad	Satkhira								Nil	Nil	0.12	0.75	46.47	57	
	Baughat			0.25					1	0.25	0.85	1.09	54.05	51	
	Khoolna			0.80					1	0.80	1.65	0.74	45.00	56	
	Narail				0.14				1	0.14	0.65	0.71	24.72	48	
	Jessore								Nil	Nil	1.11	0.80	48.21	55	
Chittagong	Jhenidah								1	0.10	0.88	0.92	44.02	55	
	Magoorah			0.10					1	0.18	0.88	0.81	32.44	51	
	Bongong					0.18			Nil	Nil	1.24	0.87	58.00	52	
	Kandi								Nil	Nil					
	Bithampur			0.40					1	0.40	0.58	0.80	47.82	51	
East Bengal	Chittagong								1	0.40	1.06	0.84	56.84	51	
	Alibagh			2.4					1	2.4	2.89	0.43	60.94	49	
	Azurgunge			0.1					1	0.23	0.71	0.73	80.40	51	
	Jungipore								Nil	Nil	0.21	0.68	61.24	48	
	Iskonia								Nil	Nil	0.40	0.58	62.62	51	
Bhola	Akhajay		0.51						1	0.51	0.96		53.44		
	Patkabul		0.10						1	0.10					
	Cox's Bazar						0.66	0.02	0.80	3	0.88	1.04	0.36	123.98	124
	Chittagong				0.00		0.01					0.78		99.41	
	Autubdia														
Bagergunge	Chittagong														
	Chittagong														
	Chittagong														
	Chittagong														
	Chittagong														

Statement of Rainfall in Bengal for the week ending Friday (6 p.m.), the 17th of February 1888—contd.

Meteorological Division	District	Station	RAINFALL.							Total		Average rainfall since 1st Feb 1887	Average rainfall since 16th May 1887	Average rainfall from 1st May 1887 to date.
			Saturday, 11th February	Sunday, 12th February	Monday, 13th February	Tuesday, 14th February	Wednesday, 15th February	Thursday, 16th February	Friday, 17th February	Number of days	inches			
EAST BENGAL—contd.	Nuwakholly	Gournaddi Bhuphal			0.17					1	0.17	0.78	?	?
		Nuwakholly			0.17					1	0.17	0.78	?	110.37
		Harishpore			0.14				0.10	1	0.14	0.77	?	110.38
		Ramganj			0.14					1	0.14	0.77	?	?
	Muzaffarpore	Madaripore	0.14							1	0.04	?	?	67.88
		Purandarpore	0.14							1	0.04	?	?	64.30
		Sonlundo	0.14							1	0.04	?	?	68.18
	Dacca	Munshikunge			0.14	0.8	0.4			3	1.37	1.3	0.8	71.04
		Dacca			0.14	0.8	0.4			3	1.37	1.3	0.8	60.80
		Narsingunge			0.14	0.8	0.4			3	1.37	1.3	0.8	62.80
		Munshikunge			0.14	0.8	0.4			3	1.37	1.3	0.8	64.10
	Hill Tipperah	Jydehpore			0.14					1	0.10	0.8	?	?
		Agartala			0.14			0.4		2	0.5	1.0	?	61.65
		Comilla			0.14			0.4		2	0.5	1.0	?	78.15
		Chandpore			0.14			0.4		2	0.5	1.0	?	82.15
	Mymensingh	Brahmanbaria			0.14			0.4		2	0.5	1.0	?	61.30
		Kamchandia			0.14			0.4		2	0.5	1.0	?	?
		Narainagar			0.14			0.4		2	0.5	1.0	?	?
		Dinaband			0.14			0.4		2	0.5	1.0	?	?
	Mymensingh	Kishoreganj			0.14			0.4		2	0.5	1.0	?	?
		Atm (Tangra)			0.14			0.4		2	0.5	1.0	?	71.17
		Mymensingh			0.14			0.4		2	0.5	1.0	?	67.10
		Jamshirdi			0.14			0.4		2	0.5	1.0	?	75.00
	Pubna	Narainagar			0.14			0.4		2	0.5	1.0	?	67.10
		Subhannakhali			0.14			0.4		2	0.5	1.0	?	72.00
		Durgamdia			0.14			0.4		2	0.5	1.0	?	?
		Dewanganj			0.14			0.4		2	0.5	1.0	?	?
NORTH BENGAL	Pubna	Pubna			0.14			0.4		2	0.5	1.0	?	66.74
		Bakergunge			0.14			0.4		2	0.5	1.0	?	63.40
	Rajshahi	Sherpore			0.14			0.4		2	0.5	1.0	?	60.92
		Nowkhilla			0.14			0.4		2	0.5	1.0	?	64.86
		Bogla			0.14			0.4		2	0.5	1.0	?	61.03
		Iskhabibi			0.14			0.4		2	0.5	1.0	?	66.23
	Maldah	Beaulah			0.14			0.4		2	0.5	1.0	?	63.09
		Narainagar			0.14			0.4		2	0.5	1.0	?	60.16
		Narainagar			0.14			0.4		2	0.5	1.0	?	?
		Narainagar			0.14			0.4		2	0.5	1.0	?	?
	Dinapore	Maldah			0.14			0.4		2	0.5	1.0	?	57.21
		Chanchal			0.14			0.4		2	0.5	1.0	?	53.40
		Gajal			0.14			0.4		2	0.5	1.0	?	?
		Sibganj			0.14			0.4		2	0.5	1.0	?	?
	Munger	Mohadehpore			0.14			0.4		2	0.5	1.0	?	58.35
		Churamon			0.14			0.4		2	0.5	1.0	?	52.00
		Raigunge			0.14			0.4		2	0.5	1.0	?	53.34
		Dumraon			0.14			0.4		2	0.5	1.0	?	62.00
	Munger	Balsonghat			0.14			0.4		2	0.5	1.0	?	61.33
		Shawmunge			0.14			0.4		2	0.5	1.0	?	61.73
		(Gyabanda)			0.14			0.4		2	0.5	1.0	?	?
		Kungpore			0.14			0.4		2	0.5	1.0	?	74.71
	Jalpaiguri	Kuriganj			0.14			0.4		2	0.5	1.0	?	74.00
		Nagarkata			0.14			0.4		2	0.5	1.0	?	83.70
		Narainagar			0.14			0.4		2	0.5	1.0	?	?
		Ulipore			0.14			0.4		2	0.5	1.0	?	?
	Dooch Behar	Jalpaiguri			0.14			0.4		2	0.5	1.0	?	42.96
		Alipore			0.14			0.4		2	0.5	1.0	?	?
		Palacotta			0.14			0.4		2	0.5	1.0	?	?
		Debaganj			0.14			0.4		2	0.5	1.0	?	95.0
	Dooch Behar	Dumraon			0.14			0.4		2	0.5	1.0	?	118.0
		Dooch Behar			0.14			0.4		2	0.5	1.0	?	100.6
		Mekhlunge			0.14			0.4		2	0.5	1.0	?	117.2
		Matochunga			0.14			0.4		2	0.5	1.0	?	192.81
	Darjeeling Hill	Buxa			0.14			0.4		2	0.5	1.0	?	102.40
		Siliguri			0.14			0.4		2	0.5	1.0	?	110.64
		Darjeeling			0.14			0.4		2	0.5	1.0	?	80.42
		Kampong			0.14			0.4		2	0.5	1.0	?	?
NORTH BENGAL	Dooch Behar	Kishoreganj			0.14			0.4		2	0.5	1.0	?	60.00
		Arrah			0.14			0.4		2	0.5	1.0	?	63.14
		Arrah			0.14			0.4		2	0.5	1.0	?	60.08
		Arrah			0.14			0.4		2	0.5	1.0	?	?
	Dooch Behar	Gondara			0.14			0.4		2	0.5	1.0	?	?
		Balarupore			0.14			0.4		2	0.5	1.0	?	?
		Battara			0.14			0.4		2	0.5	1.0	?	?
		Kataganj			0.14			0.4		2	0.5	1.0	?	49.80
	Dooch Behar	Madadpore			0.14			0.4		2	0.5	1.0	?	48.04
		Madadpore			0.14			0.4		2	0.5	1.0	?	?
		Protaganj			0.14			0.4		2	0.5	1.0	?	?
		Protaganj			0.14			0.4		2	0.5	1.0	?	43.70
	Dooch Behar	Isapore			0.14			0.4		2	0.5	1.0	?	43.91
		Dumraon			0.14			0.4		2	0.5	1.0	?	45.03
		Madadpore			0.14			0.4		2	0.5	1.0	?	?
		Madadpore			0.14			0.4		2	0.5	1.0	?	?
	Dooch Behar	Madadpore			0.14			0.4		2	0.5	1.0	?	42.23
		Madadpore			0.14			0.4		2	0.5	1.0	?	40.14
		Madadpore			0.14			0.4		2	0.5	1.0	?	42.70
		Madadpore			0.14			0.4		2	0.5	1.0	?	?
	Dooch Behar	Madadpore			0.14			0.4		2	0.5	1.0	?	?
		Madadpore			0.14			0.4		2	0.5	1.0	?	?
		Madadpore			0.14			0.4		2	0.5	1.0	?	?
		Madadpore			0.14			0.4		2	0.5	1.0	?	?
	Dooch Behar	Madadpore			0.14			0.4		2	0.5	1.0	?	44.10
		Madadpore			0.14			0.4		2	0.5	1.0	?	40.68
		Madadpore			0.14			0.4		2	0.5	1.0	?	?
		Madadpore			0.14			0.4		2	0.5	1.0	?	?

Statement of Rainfall in Bengal for the week ending Friday (6 p m.), the 17th of February 1888.—concl'd

Meteorological Division.	District.	Station.	RAINFALL							Total Number of rainy days	Rainfall of week	Total rain fall since 1st of month	Average total rain-fall from 1st of month	Total rain fall since 18th Feb 1887	Average rainfall from 18th Feb to date
			Saturday 11th February	Sunday 12th February	Monday 13th February	Tuesday 14th February	Wednesday 15th February	Thursday 16th February	Friday 17th February						
NORTH BHAR —concluded SOUTH BHAR	Sargudha	Gopalgunge								Nil	Nil	Nil	0.40	42.58	41.8
		Sewan								Nil	Nil	Nil	0.42	39.74	44.1
	Shahabad	Chuprah								Nil	Nil	Nil	0.35	38.42	41.1
		Buxar								Nil	Nil	0.02	0.35	34.73	38.1
		Dumrae								Nil	Nil	Nil	?	39.63	?
		Minboonah								Nil	Nil	Nil	0.48	41.88	41.1
		Nasirabad								Nil	Nil	Nil	0.41	36.44	41.1
		Arrah								Nil	Nil	Nil	0.30	41.34	40.1
		Mohania								Nil	Nil	Nil	?	?	?
	Gya	Aurungabad								Nil	Nil	Nil	0.8	29.06	43.1
		Gya								Nil	Nil	Nil	0.46	43.79	41.1
		Nowadah								Nil	Nil	0.02	0.51	36.54	40.1
		Jehanabad								Nil	Nil	Nil	0.17	44.77	40.1
		Arwal								Nil	Nil	0.11	?	41.13	?
		Daudnagar								Nil	Nil	Nil	?	29.61	?
		Sherrghat								Nil	Nil	Nil	?	36.45	?
		Rayas								Nil	Nil	Nil	?	?	?
		Pakri Barawan								Nil	Nil	Nil	?	22.24	?
	Patna	Patna								Nil	Nil	Nil	0.17	37.17	42.1
		Dumrae								Nil	Nil	Nil	0.32	38.44	41.1
		Behar								Nil	Nil	Nil	0.47	35.54	41.1
		Barre								Nil	Nil	Nil	0.40	36.05	39.1
		Bickram								Nil	Nil	Nil	?	40.65	?
		Hilsa								Nil	Nil	Nil	?	34.54	?
	Munger	Begoonerai								Nil	Nil	Nil	0.55	40.68	40.1
		Mouktyr								Nil	Nil	0.05	0.44	47.24	46.1
		Jamu								Nil	Nil	0.09	0.51	40.02	40.1
		Gyri								Nil	Nil	Nil	?	42.63	?
	South Masulipore.	Sheikhpura								Nil	Nil	Nil	?	28.54	?
		Bansulipore								Nil	Nil	Nil	0.41	41.23	42.1
		Bansa								Nil	Nil	0.07	0.45	31.96	44.1
		Kulping								Nil	Nil	Nil	?	43.45	?
	Sonthal Pergunnahs	Rajmouli								Nil	Nil	0.07	0.25	57.98	52.1
		Goddas								Nil	Nil	0.10	0.40	49.56	47.1
		Jakur								Nil	Nil	0.24	0.35	78.11	51.1
		Nya Dootaka								Nil	Nil	0.46	0.64	45.71	54.1
		Deokhur								Nil	Nil	0.16	0.24	47.36	51.1
		Jamunara								Nil	Nil	0.56	0.27	40.05	50.1
		Somra								Nil	Nil	?	?	?	?
		Namchait								Nil	Nil	0.05	?	36.79	?
CHUTIA NAG-PUR.	Hasaribagh	Pachamua								Nil	Nil	0.39	0.62	42.00	45.1
		(Girdi)								Nil	Nil	0.41	0.67	47.51	48.1
		Hawmoukhu								Nil	Nil	0.45	0.74	51.14	54.1
		Bommaguran								Nil	Nil	0.42	0.72	51.14	54.1
		Nanudi Hills								Nil	Nil	0.60	0.18	58.60	57.1
		Jhoomrah Hills								Nil	Nil	Nil	?	39.70	?
		Barhi								Nil	Nil	0.19	?	49.97	?
		Chatra								Nil	Nil	Nil	?	7.46	?
		Karagadha								Nil	Nil	0.80	?	51.54	?
		Kamphar								Nil	Nil	0.80	?	51.54	?
	Lohardugga	Lohardugga								Nil	Nil	0.89	?	57.16	?
		Kanchi				0.05				1	0.05	0.77	0.87	58.38	52.1
		Palanow								Nil	Nil	0.08	0.45	50.71	45.1
		Silis								Nil	Nil	?	?	?	?
		Balumat								Nil	Nil	1.20	?	?	?
		Hosseinabad								Nil	Nil	Nil	?	35.71	?
		Garsuh								Nil	Nil	0.19	?	54.85	?
	Singbhoom	Cnyeumasa			0.05					1	0.05	1.71	0.72	53.03	53.1
		Chakradhar				0.27				1	0.27	1.99	?	41.22	?
		Chatsilla								Nil	Nil	0.91	?	55.79	?
		Boharagura				0.12				1	0.12	1.80	?	41.15	?
	Manbhoom	Purulia								Nil	Nil	1.11	0.87	46.53	50.1
		Groundpore								Nil	Nil	0.42	0.86	29.43	46.1
		Kaphunath-pore		0.38						1	0.38	1.21	?	38.64	?
		Barrabhoom								Nil	Nil	1.18	?	43.31	?
		Jhalda								Nil	Nil	1.32	?	?	?
		Chas								Nil	Nil	0.01	?	?	?

Explanation.—Indicates that no rain has fallen. If the return for any day has not been received, the corresponding space is left blank. If any of the returns are wanting the corresponding spaces in the total rainfall columns are left blank.

CALCUTTA, the 21st February 1888.

**SUMMARY OF THE RAINFALL AND METEOROLOGICAL OBSERVATIONS
TAKEN IN BENGAL FOR THE WEEK ENDING FRIDAY, THE 17TH OF
FEBRUARY 1888.**

At the close of the previous week a low pressure area had been developed over Orissa and parts of West Bengal, and on Friday, the 10th, the depression had drifted in an easterly direction and had established itself over East Bengal, giving moderate to heavy rain over this district. On the 11th or the first day of the present week, however, pressure increased briskly over East Bengal and Assam, and slightly over the other parts of Bengal, and the depression practically disappeared and weather conditions therefore rapidly improved over the province, while temperature commenced to fall rather rapidly, and on this day rainfall was practically absent over the whole province. On the 12th, however, owing to rather irregular barometric changes which took place over Upper India, a large shallow depression was formed over North-Western India, Guzerat and the Central Provinces, and with the formation of the disturbance a few showers fell in Orissa. On the 13th the barometric depression apparently moved towards the east, and it commenced to affect the weather in Bengal and Orissa when winds strengthened in Orissa and conditions again became unsettled. Skies also clouded over and rain commenced to fall, rainfall being received at a considerable number of stations in Orissa and in South-West and East Bengal, and at a few in North Bengal. On the 14th the depression enlarged and became more shallow, and through it still extended over a considerable part of Bengal its effect was feeble, and again on this day rain showers were received only in parts of Orissa, South-West and East Bengal, and the rainfall did not extend to the other districts, though a few local showers were reported from Chutia Nagpur. On the 15th the low pressure area was still more feeble, and on the 16th it had entirely disappeared. For the remainder of the week therefore conditions in Bengal became settled and rainfall ceased.

The winds blowing over the province during the greater part of the week have been more or less northerly at the majority of stations, but at all the coast stations and at some of those inland, and particularly when affected by the depression, southerly winds set in for several days. As usual also, with the setting in of southerly winds, humidity and temperature increased rather rapidly. In these respects therefore the conditions have been those which usually mark the commencement of the transition from the north-east monsoon to the hot season.

Pressure.—The variations of pressure during the week have been rather large; on the first day pressure rose rather rapidly, but from the 12th up to the 15th (inclusive) pressure fell steadily and rather rapidly, the fall in many cases exceeding a tenth of an inch; on the 16th pressure increased, but on the 17th it again fell at many stations. The mean pressure of the whole province for the week has therefore been 0.06 inch below the normal.

Temperature.—For the first four days of the week temperature steadily rose, and at some stations there was an increase in the mean temperature of nearly 10° during this period. A slight fall then set in which became rather rapid at the close of the week. In addition, too, on the 16th and 17th, there was a very rapid fall in the humidity. For the whole week the mean temperature of the province has been 0.8° in excess of the normal.

The distribution of temperature during the week is best seen from the figures given in the table below, where the average maximum, minimum and mean temperatures at nine typical stations in different districts of the province are given and compared with the normal values for the same period. At these stations the day temperatures have been considerably below the normal, while the night temperatures have been above it. The mean temperature is more nearly normal.

Table showing the excess or defect of the actual mean temperature from the normal for the week ending the 17th February 1888.

	Normal mean maxi- mum tem- perature for the week ending 17th February	Actual mean maxi- mum tem- perature for the week ending 17th February 1888	Variation of actual mean from the nor- mal	Normal mean mini- mum tem- perature for the week ending 17th February	Actual mean mini- mum tem- perature for the week ending 17th February 1888	Variation of actual mean from the nor- mal	Normal mean daily tempera- ture for the week ending 17th February	Actual mean daily tempera- ture for the week ending 17th February 1888	Variation of actual mean from the nor- mal
Cuttack	84.0	84.0	-4.3	65.0	68.2	+ 2	77.0	76.4	-0.6
Calcutta	81.2	77.5	-3.7	59.4	60.6	+1.2	70.3	69.0	-1.3
Dacca	81.8	77.1	-4.7	67.7	68	+0.8	69.8	68	-2.0
Burdwan	81.9	80.2	-1.7	57.7	59.5	+1.8	69.8	69.9	+0.1
Patna	7.3	70.6	-0.7	51.7	51.7	+1.0	63.5	64.7	+1.2
Gya	81.2	79.4	-1.8	55.4	56.5	+1.1	68.3	68.0	-0.3
Purneah	78.1	70.4	-1.8	51.2	49	-1.7	63.6	62.1	-1.5
Hazariabagh	72.2	74.6	+2.6	53.7	53	-0.2	61.5	61.0	-0.5
Darjeeling	45.6	42.7	-2.8	33.0	30.6	-2.4	59.5	56.7	-2.8

Rainfall.—The stations in East Bengal and Orissa have received an average rainfall of rather more than half an inch, while those in South-West Bengal average a quarter of an inch. The stations in North Bengal have received about a tenth of an inch. The other districts have been practically rainless.

The following table gives the summary of the temperature and rainfall data of each of the seven meteorological divisions of the province for the week ending Friday, the 17th of February 1888:—

METEOROLOGICAL DIVISIONS.	TEMPERATURE						RAINFALL									
	Hig. est. observed during week	Lowest observed during week	Averages for week			Average mean of week above & below normal mean of week.	Of week			Rain days			Since 1st of month		Since 15th May 1887	
			Hig. heat of each day	Lowest of each day	Of mean for each day		Average	Normal average	Variation	Average number in week	Normal average number in week	Variation	Average	Normal average	Average.	Normal average.
Orissa	89.1	53.5	81.6	67.7	71.7	+1.0	0.0	0.20	+0.4	2.0	0.0	+1.4	1.85	0.00	46.57	54.86
South-West Bengal	81.7	30.0	78.0	60.0	69	+0.1	0.25	0.36	-0.11	0.7	0.7	0	1.33	0.81	48.87	53.06
East Bengal	83.1	49.8	76.0	68.4	67	+0.0	0.00	0.40	+0.20	1.5	0.7	+0.8	1.00	0.77	76.78	76.87
North Bengal	82.7	46.3	77.0	6.8	64.3	+1.8	0.12	0.14	-0.22	0.3	0.7	-0.4	0.42	0.70	74.25	70.57
North Behar	81.0	5.1	7.4	1.0	63.2	+0.3	Nil	0.22	-0.22	0.0	0.1	-0.1	0.02	0.41	52.77	48.02
South Behar	81	0.0	77	54.0	65.6	+0	Nil	0.17	-0.17	0.0	0	-0.5	0.08	0.41	47.7	44.48
Cuttack Nagpur	78.1*	41.0*	71.0*	28.8*	63.2*	+1.1*	0.01	0.25	-0.24	0.2	0.7	-0.5	0.73	0.61	16.14	50.05

* Chyebassa not included

METEOROLOGICAL OFFICE, BENGAL.

A. PEDLER,

The 22nd February 1888

Offg. Meteorological Reporter to the Govt. of Bengal.

Results of the Thermometrical Observations taken at the Meteorological Office, Chowringhee, from 12th to 18th February 1888

MONTH	TEMPERATURE					HYGROMETRY					Rain.
	Date	Mean	Maximum	Range.	Minimum	Mean wet bulb	Vapour tension	Dew point	Humidity		
1888		°	°	°	°	°	Inches	°	%	Inches.	
February	12th	68.6	80.9	12.3	57.1	64.3	716	61.4	78	Nil	
"	13th	68.9	80.9	12.0	62.7	65.8	595	63.9	84	"	
"	14th	71.6	80.1	15.2	64.9	69.7	702	68.7	91	"	
"	15th	71.9	84.2	19.1	65.1	68.5	620	65.3	74	"	
"	16th	71.4	80.9	19.0	61.9	63.6	485	58.1	63	"	
"	17th	70.1	81.1	23.1	59.0	59.0	351	49.4	48	"	
"	18th	72.9	83.1	19.3	61.1	67.1	587	61.5	73	"	

The mean temperature of the seven days ... 71.1

The extreme variation of temperature ... 27.1

The maximum temperature ... 84.2

The mean relative humidity ... 73%

The total fall of rain from 12th to 18th February 1888 ... Nil

The mean temperature and humidity are obtained by applying to the mean of the 10h, 16h, and minimum readings a correction dependent on the range, and derived from the hourly observations at the Surveyor-General's Office, Chowringhee, in past years.

METEOROLOGICAL OFFICE, INDIA;

A. PEDLER,

The 20th February 1888.

For Offg. Meteorological Reporter to the Govt. of India.

MEMORANDUM.

THE table appended to this memorandum furnishes the following particulars in connection with the registration of births and deaths in the principal Municipalities in Bengal during the week ending 28th January 1888:—

1. The birth-rate in these Municipalities amounted to 20·4 per 1,000 of population against very nearly the same proportion, viz., 20·2 per 1,000 in the preceding week ending 21st January, and the death-rate to 26·1 against 25·3 per 1,000.

2. The following Municipalities returned the highest proportions of births and deaths:—

Births.			Deaths.		
		Ratio per mille.			Ratio per mille.
Utterpara ...	...	56·6	Serampore ...	...	60·8
Narainganj ...	...	49·7	Suburbs of Calcutta ...	...	47·4
Serampore ...	...	33·4	Hughli ...	...	40·3
Beaulah ...	...	31·5	Burdwan ...	...	38·1
Durbhanga ...	...	31·5	Puri ...	...	37·8

3. In comparison with the results of the preceding week, there was a noticeable enhancement of mortality from the maladies coming under the head of "other causes," while the fatal results from the other diseases exhibited only fractional differences, *vide* figures given below—

				Ratio per mille during the weeks ending—	
				28th Jan. 1888.	21st Jan. 1888.
Cholera ...	...	...	...	2·6	3·0
Small-pox ...	...	...	...	·1	·03
Fever ...	...	...	...	10·3	10·9
Bowel-complaints ...	...	...	...	4·4	4·1
Injury ...	...	...	...	·4	·3
Other diseases ...	...	...	...	8·3	6·9

4. Of the diseases abovenamed, cholera, fever, and "other causes" proved conspicuously fatal in the following Municipalities, and bowel-complaints only in the Puri town, where the death-rate from it stood at 12·6 per 1,000 of population:—

Cholera.		Fever.		Other causes.	
	Ratio per mille.		Ratio per mille.		Ratio per mille.
Serampore ...	27·5	Burdwan ...	24·4	Serampore ...	19·6
Puri ...	8·4	Hughli ...	22·8	Suburbs of Calcutta ...	14·7
Suburbs of Calcutta ...	7·0			Puri ...	12·6
				Gya ...	12·3
				Monghyr ...	10·8

5. The casualties in relation to Sex, Class and Age were returned at the rates indicated below—

According to Sex.			According to Class.			According to Age.		
		Ratio per mille.			Ratio per mille.			Ratio per mille.
Males ...	...	28·7	Christians ...	...	39·1	Under 1 year ...	...	200·6
Females ...	...	23·2	Hindus ...	...	25·3	1 and under 5 years ...	...	26·5
Ratio of male deaths to every 100 female deaths ...	...	140	Mahomedans ...	...	27·9	5 " 10 " ...	...	13·1
						10 " 15 " ...	...	13·1
						15 " 20 " ...	...	19·9
						20 " 30 " ...	...	16·5
						30 " 40 " ...	...	17·3
						40 " 50 " ...	...	22·7
						50 " 60 " ...	...	28·4
						60 years and upwards ...	...	69·1

R. LIDDERDALE, M.D., Deputy Surgeon-General,

The 20th February 1888.

Sanitary Commissioner for Bengal.

DISTRICTS.		NAMES OF MUNICIPALITIES.		POPULATION			BIRTHS.			MORTALITY ACCORDING TO—												
				NUMBER OF—			RATIO PER 1,000 OF POPULATION PER ANNUM			DISEASE												
				Total			Total			DEATHS FROM—												
				Males			Males			All causes												
				Males			Males			All causes												
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Special census of the Europeans in the District of Calcutta was taken in February 1887, and the results are given in the following table. The ratio of the Europeans to the total population is 1 in 100. The ratio of the Europeans to the total population is 1 in 100. The ratio of the Europeans to the total population is 1 in 100.

13			14			15			16		
MORTALITY ACCORDING TO—											
Class			Age			Age			Age		
DEATHS AMONG—			RATIOS PER 1,000 OF POPULATION PER ANNUM			DEATHS			RATIOS PER 1,000 OF POPULATION PER ANNUM		
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DEATHS AMONG—			RATIOS PER 1,000 OF								

MEMORANDUM.

THE birth and death returns of the principal Municipalities in Bengal yield the following results for the week ending 4th February 1888:—

1. The ratios per *mille* of births and deaths for the period above referred to stand at— for births 19·2 and for deaths 24·8, the records of the preceding week ending 28th January, being 20·4 and 26·1, respectively, showing a retrogression in the registration of both.

2. In the following Municipalities births and deaths were registered at the highest rates:—

Births.			Deaths.		
		Ratio per mille			Ratio per mille
Narainganj	...	57·9	Utterpara	...	113·2
Darjiling	...	45·6	Beauleah	...	60·4
Comulah	...	34·6	Serampore	...	51·0
Midnapore	...	34·1	Suburbs of Calcutta	...	45·3
Serampore	...	33·4	Kishnaghur	...	30·3
Monghyr	...	33·1	Gya	...	29·4
Arrah	...	32·3	Puri	...	29·4
Beauleah	...	31·5			

3. The casualty-rates from the principal diseases specified below exhibit no noticeable variations in comparison with the death-rates from the same diseases in the preceding week:—

						Ratio per mille during the weeks ending—	
						4th Feb 1888	28th Jan 1888
Cholera	...	...	...	...	...	2·4	2·6
Small-pox	...	...	...	...	...	1	1
Fever	...	...	...	...	...	9·9	10·3
Bowel-complaints	...	...	...	...	...	4·6	4·4
Injury	...	...	...	...	...	1	·4
Other causes	...	...	...	...	...	7·4	8·3

4. While no Municipality suffered much from small-pox or presented a large number of casualties from injury, the following returned conspicuously high death-rates from the rest of the diseases mentioned in the above table:—

Cholera.		Fever.		Bowel-complaints		Other causes.	
	Ratio per mille		Ratio per mille		Ratio per mille		Ratio per mille
Utterpara	81·9	Beauleah	52·5	Serampore	13·7	Serampore	17·7
Suburbs of Calcutta	7·1	Baidwan	22·9	Howrah	11·1	Gya	15·7
Puri	6·3			Suburbs of Calcutta	10·8	Midnapore	12·4
Serampore	5·9					Suburbs of Calcutta	12·4
Hughli	1·0						

It will be noticed that cholera prevailed with marked severity in Utterpara and fever in Beauleah.

5. Distributed under the heads of *Sex*, *Class* and *Age*, the mortality of the week under notice stood as follows:—

According to Sex.		According to Class.		According to Age.	
	Ratio per mille.		Ratio per mille.		Ratio per mille.
Males	25·6	Christians	21·7	Under 1 year	178·4
Females	23·8	Hindus	26·1	1 and under 5 years	23·2
Ratio of male deaths to every 100 female deaths	121	Mahomedans	21·9	5 " 10 "	12·3
				10 " 15 "	7·2
				15 " 20 "	17·8
				20 " 30 "	14·4
				30 " 40 "	19·6
				40 " 50 "	18·5
				50 " 60 "	35·0
				60 years and upwards	73·6

R. LIDDERDALE, M.D., Deputy Surgeon-General,
Sanitary Commissioner for Bengal.

The 20th February 1888.

Statement showing the Results of the Registration of Births and Deaths in the Principal Municipalities in Bengal during the week ending 14th February 1888.

Districts.	NAMES OF MUNICIPALITIES.	POPULATION.			BIRTHS.			MORTALITY ACCORDING TO—										Sex.			
		Males.		Total.	Males.		Total.	Disease.										RATIO PER 1,000 OF POPULATION.		Ratio of male deaths to every 100 female deaths.	
		Males.		Total.	Males.		Total.	Disease.										RATIO PER 1,000 OF POPULATION.			
		Males.	Females.	Total.	Males.	Females.	Total.	Small-pox.	Fever.	Bowel-complaints.	Injury.	Other diseases.	All causes.	Cholera.	Small-pox.	Fever.	Bowel-complaints.	Injury.	Other diseases.	All causes.	
1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	18	19	20	21	22
Burdwan	Burdwan	18,063	16,017	34,080	10	4	14	15	15	2	1	13	1	...	...	...	...	...	...	...	...
Midnapore	Midnapore	16,927	16,633	33,560	17	5	22	22	28	3	1	6	1	...	...	...	...	...	...	...	...
Hughli	Hughli and Chinsurah	19,179	19,559	38,738	4	3	7	7	5	4	0	9	4	133	3	...	...	...	...	...	...
Baranagar	Baranagar	18,559	12,937	31,496	12	5	17	23	5	8	33	4	240	3	...	...	...	...	...	...	...
Howrah	Howrah	5,045	2,464	7,509	3	3	6	23	23	23	23	23	23	23	...	...	...	...	...	...	...
24 Pargannas	24 Pargannas	53,153	37,660	90,813	16	3	19	9	9	2	1	13	45	17	6	40	11	4	7	4	23
	Ball	7,836	6,979	14,815	3	2	5	10	7	0	17	5	130	1	...	...	...	...	...	...	...
	Suburbs of Calcutta	147,595	104,334	251,929	63	30	93	13	0	6	2	69	219	7	...	...	...	...	...	...	...
	Kishanpur	13,263	14,214	27,477	4	7	11	7	6	13	2	29	8	57	...	...	...	...	...	...	...
	Ranaghat	4,029	4,655	8,683	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...
	Santipur	13,705	15,979	29,684	1	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...
	Jessore	4,830	3,665	8,495	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...
	Rampore Beaulah	10,768	9,025	19,793	5	7	12	13	13	13	13	13	13	13	...	...	...	...	...	...	...
	Darjiling	3,029	2,947	5,976	4	3	7	20	10	5	45	6	133	...	...	...	...	...	...	...	...
	Dacca	42,782	37,379	80,161	8	5	13	5	2	3	2	8	4	160	...	...	...	...	...	...	...
	Narainganj	7,605	4,956	12,561	9	5	14	37	2	29	7	57	0	180	...	...	...	...	...	...	...
	Chittagong	18,310	8,760	27,070	2	4	6	4	7	9	4	14	1	50	...	...	...	...	...	...	...
	Comillah	8,153	6,333	14,486	4	5	9	13	4	10	2	31	6	89	...	...	...	...	...	...	...
	Fatma City	73,762	51,475	125,237	25	20	45	8	1	6	15	...	...	...	...	...	...	...	...	...	...
	Gya	38,229	37,531	75,760	10	18	28	13	0	12	3	23	3	105	...	...	...	...	...	...	...
	Arra	20,609	21,605	42,214	5	5	10	6	1	6	16	...	...	...	...	...	...	...	...	...	...
	Meerutpore	23,684	19,695	43,379	10	7	17	12	0	20	3	52	3	58	...	...	...	...	...	...	...
	Durbandha	33,774	32,322	66,096	25	11	36	15	1	15	1	30	2	160	...	...	...	...	...	...	...
	Baran	26,014	27,505	53,519	3	4	7	2	0	3	3	6	8	75	...	...	...	...	...	...	...
	Bhagulpore	29,640	27,813	57,453	10	19	29	17	2	19	2	38	2	109	...	...	...	...	...	...	...
	Monohar	28,151	29,366	57,517	16	21	37	14	3	19	3	33	3	79	...	...	...	...	...	...	...
	Purneah	8,083	6,538	14,621	1	1	2	3	4	5	1	7	15	...	...	...	...	...	...	...	...
	Puri	13,217	11,537	24,754	6	2	8	12	6	4	2	...	...	...	...	...	...	...	...	...	...
	TOTAL	702,830	619,691	1,322,521	259	200	459	117	79	192	144	61	2	253	116	9	159	630	24	74	248
																					131

* A special census of the Europeans in the Municipalities was recently taken, as the census of this section of the community taken in February 1881, was not reliable owing to the Europeans being at a minimum in that month. The number of the natives in the above table, except in the case of the Municipality of Calcutta, is based on the census of 1881, and is not reliable for the purpose of the present statement.

		13			14			15			16										
		MORTALITY ACCORDING TO—																			
DISTRICTS.	NAMES OF MUNICIPALITIES.	Class				Age.															
		DEATHS AMONG—				RATIO PER 1,000 OF POPULATION PER ANNUM.															
		Christians.	Hindus.	Muslims.	Other classes.	Under 1 year.	1 and under 3 years.	5 and under 10 years.	10 and under 15 years.	15 and under 20 years.	20 and under 30 years.	30 and under 40 years.	40 and under 50 years.	50 and under 60 years.	60 years and upwards.						
Burdwan	Burdwan	10	220	304	...	...	...	...	...	...	...	...	...	...	104
Midnapore	Midnapore	16	201	879	...	...	...	...	...	...	...	...	...	...	...
Hughli	Hughli and Chinsurah	16	263	229	...	...	...	...	...	...	...	...	...	...	...
Scrumpore	Scrumpore	24	505	1005	...	...	...	...	...	...	...	...	...	...	...
Howrah	Howrah	12	1172	...	...	...	...	...	...	...	...	...	...	...	...
24 Pargunnahs	Suburbs of Calcutta	35	507	252	...	...	...	...	...	...	...	...	...	...	...
Nadda	Kishoreganj	13	116	...	...	...	...	...	...	...	...	...	...	...	...
Jessore	Jessore	1	25	...	...	...	...	...	...	...	...	...	...	...	...
Rajshahye	Rampore Beaulah	10	225	689	...	...	...	...	...	...	...	...	...	...	...
Darjiling	Darjiling	2	226	...	...	...	...	...	...	...	...	...	...	...	...
Decca	Decca	8	133	92	...	...	...	...	...	...	...	...	...	...	...
Chittagong	Chittagong	1	82	84	...	...	...	...	...	...	...	...	...	...	...
Comilla	Comilla	1	100	204	...	...	...	...	...	...	...	...	...	...	...
Petna	Petna City	38	106	879	...	...	...	...	...	...	...	...	...	...	...
Gya	Gya	35	303	259	...	...	...	...	...	...	...	...	...	...	...
Arrah	Arrah	10	168	221	...	...	...	...	...	...	...	...	...	...	...
Morarpore	Morarpore	4	67	125	...	...	...	...	...	...	...	...	...	...	...
Burhanpore	Burhanpore	22	236	178	...	...	...	...	...	...	...	...	...	...	...
Chupra	Chupra	5	63	159	...	...	...	...	...	...	...	...	...	...	...
Bhagalpore	Bhagalpore	15	196	181	...	...	...	...	...	...	...	...	...	...	...
Monghyr	Monghyr	16	186	83	...	...	...	...	...	...	...	...	...	...	...
Purneah	Purneah	3	179	21	...	...	...	...	...	...	...	...	...	...	...
Patna	Patna	14	297	...	...	...	...	...	...	...	...	...	...	...	...
Total	Total	406	217	261	...	104	14	31	10	31	73	85	57	61	736						

R. LIDDERDALE, M.D., Deputy Surgeon-General.

OFFICE OF SANITARY COMMISSIONER FOR BENGAL, }
The 22nd February 1888.

PUBLIC WORKS DEPARTMENT, BENGAL.

IRRIGATION BRANCH.

IRRIGATION OPERATIONS FOR THE OFFICIAL YEAR 1887-88.

Areas leased for Irrigation up to end of December 1887.

[illegible]

The 21st February 1858.

A. D. McARTHUR, Major, R.E.,
Under-Secretary to the Govt. of Bengal.

PUBLIC WORKS DEPARTMENT,--BENGAL.

IRRIGATION BRANCH.

Statement showing heights over mean sea-level and low-water in the Rivers Ganges, Bhagiruth-e, Jellinghee, and Beahmapoolra, for the month of April 1887.

RIVER GANGES.														RIVER BRAMHAPUTRA.																	
Mirzapore.		Benares.		Buxar.		Dumraon.		Munger.		Sahibganj.		Rampore.		Barhampore.		RIVER JELLINGHEN.		RIVER BRAMHAPUTRA.													
88.		135.		48.		90.		177.		87.		257.		110.		181.		471.		94.		120.		120.		120.		120.		120.	
From Allahabad.		From Allahabad.		From Allahabad.		From Allahabad.		From Allahabad.		From Allahabad.		From Allahabad.		From Allahabad.		From Allahabad.		From Allahabad.		From Allahabad.		From Allahabad.		From Allahabad.		From Allahabad.		From Allahabad.		From Allahabad.	
Height over zero of gauge.		Height over mean sea-level.		Height over zero of gauge.		Height over mean sea-level.		Height over zero of gauge.		Height over mean sea-level.		Height over zero of gauge.		Height over mean sea-level.		Height over zero of gauge.		Height over mean sea-level.		Height over zero of gauge.		Height over mean sea-level.		Height over zero of gauge.		Height over mean sea-level.		Height over zero of gauge.		Height over mean sea-level.	
Below zero.	3.83	202.39	194.51	0.00	168.13	6.00	141.13	Below zero.	2.17	6.93	41.50	8.08	11.07	1.87	2.02	7.02	148.88	0.10	2.02	7.02	148.88	0.10	2.02	7.02	148.88	0.10	2.02	7.02	148.88		
Below zero.	3.83	202.39	194.51	0.00	168.13	6.00	141.13	Below zero.	2.17	6.93	41.50	8.08	11.07	1.87	2.02	7.02	148.88	0.10	2.02	7.02	148.88	0.10	2.02	7.02	148.88	0.10	2.02	7.02	148.88		
Below zero.	3.83	202.39	194.51	0.00	168.13	6.00	141.13	Below zero.	2.17	6.93	41.50	8.08	11.07	1.87	2.02	7.02	148.88	0.10	2.02	7.02	148.88	0.10	2.02	7.02	148.88	0.10	2.02	7.02	148.88		
Below zero.	3.83	202.39	194.51	0.00	168.13	6.00	141.13	Below zero.	2.17	6.93	41.50	8.08	11.07	1.87	2.02	7.02	148.88	0.10	2.02	7.02	148.88	0.10	2.02	7.02	148.88	0.10	2.02	7.02	148.88		
Below zero.	3.83	202.39	194.51	0.00	168.13	6.00	141.13	Below zero.	2.17	6.93	41.50	8.08	11.07	1.87	2.02	7.02	148.88	0.10	2.02	7.02	148.88	0.10	2.02	7.02	148.88	0.10	2.02	7.02	148.88		
Below zero.	3.83	202.39	194.51	0.00	168.13	6.00	141.13	Below zero.	2.17	6.93	41.50	8.08	11.07	1.87	2.02	7.02	148.88	0.10	2.02	7.02	148.88	0.10	2.02	7.02	148.88	0.10	2.02	7.02	148.88		
Below zero.	3.83	202.39	194.51	0.00	168.13	6.00	141.13	Below zero.	2.17	6.93	41.50	8.08	11.07	1.87	2.02	7.02	148.88	0.10	2.02	7.02	148.88	0.10	2.02	7.02	148.88	0.10	2.02	7.02	148.88		
Below zero.	3.83	202.39	194.51	0.00	168.13	6.00	141.13	Below zero.	2.17	6.93	41.50	8.08	11.07	1.87	2.02	7.02	148.88	0.10	2.02	7.02	148.88	0.10	2.02	7.02	148.88	0.10	2.02	7.02	148.88		
Below zero.	3.83	202.39	194.51	0.00	168.13	6.00	141.13	Below zero.	2.17	6.93	41.50	8.08	11.07	1.87	2.02	7.02	148.88	0.10	2.02	7.02	148.88	0.10	2.02	7.02	148.88	0.10	2.02	7.02	148.88		
Below zero.	3.83	202.39	194.51	0.00	168.13	6.00	141.13	Below zero.	2.17	6.93	41.50	8.08	11.07	1.87	2.02	7.02	148.88	0.10	2.02	7.02	148.88	0.10	2.02	7.02	148.88	0.10	2.02	7.02	148.88		
Below zero.	3.83	202.39	194.51	0.00	168.13	6.00	141.13	Below zero.	2.17	6.93	41.50	8.08	11.07	1.87	2.02	7.02	148.88	0.10	2.02	7.02	148.88	0.10	2.02	7.02	148.88	0.10	2.02	7.02	148.88		
Below zero.	3.83	202.39	194.51	0.00	168.13	6.00	141.13	Below zero.	2.17	6.93	41.50	8.08	11.07	1.87	2.02	7.02	148.88	0.10	2.02	7.02	148.88	0.10	2.02	7.02	148.88	0.10	2.02	7.02	148.88		
Below zero.	3.83	202.39	194.51	0.00	168.13	6.00	141.13	Below zero.	2.17	6.93	41.50	8.08	11.07	1.87	2.02	7.02	148.88	0.10	2.02	7.02	148.88	0.10	2.02	7.02	148.88	0.10	2.02	7.02	148.88		
Below zero.	3.83	202.39	194.51	0.00	168.13	6.00	141.13	Below zero.	2.17	6.93	41.50	8.08	11.07	1.87	2.02	7.02	148.88	0.10	2.02	7.02	148.88	0.10	2.02	7.02	148.88	0.10	2.02	7.02	148.88		
Below zero.	3.83	202.39	194.51	0.00	168.13	6.00	141.13	Below zero.	2.17	6.93	41.50	8.08	11.07	1.87	2.02	7.02	148.88	0.10	2.02	7.02	148.88	0.10	2.02	7.02	148.88	0.10	2.02	7.02	148.88		
Below zero.	3.83	202.39	194.51	0.00	168.13	6.00	141.13	Below zero.	2.17	6.93	41.50	8.08	11.07	1.87	2.02	7.02	148.88	0.10	2.02	7.02	148.88	0.10	2.02	7.02	148.88	0.10	2.02	7.02	148.88		
Below zero.	3.83	202.39	194.51	0.00	168.13	6.00	141.13	Below zero.	2.17	6.93	41.50	8.08	11.07	1.87	2.02	7.02	148.88	0.10	2.02	7.02	148.88	0.10	2.02	7.02	148.88	0.10	2.02	7.02	148.88		
Below zero.	3.83	202.39	194.51	0.00	168.13	6.00	141.13	Below zero.	2.17	6.93	41.50	8.08	11.07	1.87	2.02	7.02	148.88	0.10	2.02	7.02	148.88	0.10	2.02	7.02	148.88	0.10	2.02	7.02	148.88		
Below zero.	3.83	202.39	194.51	0.00	168.13	6.00	141.13	Below zero.	2.17	6.93	41.50	8.08	11.07	1.87	2.02	7.02	148.88	0.10	2.02	7.02	148.88	0.10	2.02	7.02	148.88	0.10	2.02	7.02	148.88		
Below zero.	3.83	202.39	194.51	0.00	168.13	6.00	141.13	Below zero.	2.17	6.93	41.50	8.08	11.07	1.87	2.02	7.02	148.88	0.10	2.02	7.02	148.88	0.10	2.02	7.02	148.88	0.10	2.02	7.02	148.88		
Below zero.	3.83	202.39	194.51	0.00	168.13	6.00	141.13	Below zero.	2.17	6.93	41.50	8.08	11.07	1.87	2.02	7.02	148.88	0.10	2.02	7.02	148.88	0.10	2.02	7.02	148.88	0.10	2.02	7.02	148.88		
Below zero.	3.83	202.39	194.51	0.00	168.13	6.00	141.13	Below zero.	2.17	6.93	41.50	8.08	11.07	1.87	2.02	7.02	148.88	0.10	2.02	7.02	148.88	0.10	2.02	7.02	148.88	0.10	2.02	7.02	148.88		
Below zero.	3.83	202.39	194.51	0.00	168.13	6.00	141.13	Below zero.	2.17	6.93	41.50	8.08	11.07	1.87	2.02	7.02	148.88	0.10	2.02	7.02	148.88	0.10	2.02	7.02	148.88	0.10	2.02	7.02	148.88		
Below zero.	3.83	202.39	194.51	0.00	168.13	6.00	141.13	Below zero.	2.17	6.93	41.50	8.08	11.07	1.87	2.02	7.02	148.88	0.10	2.02	7.02	148.88	0.10	2.02	7.02	148.88	0.10	2.02	7.02	148.88		
Below zero.	3.83	202.39	194.51	0.00	168.13	6.00	141.13	Below zero.	2.17	6.93	41.50	8.08	11.07	1.87	2.02	7.02	148.88	0.10	2.02	7.02	148.88	0.10	2.02	7.02	148.88	0.10	2.02	7.02	148.88		
Below zero.	3.83	202.39	194.51	0.00	168.13	6.00	141.13	Below zero.	2.17	6.93	41.50	8.08	11.07	1.87	2.02	7.02	148.88	0.10	2.02	7.02	148.88	0.10	2.02	7.02	148.88	0.10	2.02	7.02	148.88		
Below zero.	3.83	202.39	194.51	0.00	168.13	6.00	141.13	Below zero.	2.17	6.93	41.50	8.08	11.07	1.87	2.02	7.02	148.88	0.10	2.02	7.02	148.88	0.10	2.02	7.02	148.88	0.10	2.02	7.02	148.88		
Below zero.	3.83	202.39	194.51	0.00	168.13	6.00	141.13	Below zero.	2.17	6.93	41.50	8.08	11.07	1.87	2.02	7.02	148.88	0.10	2.02	7.02	148.88	0.10	2.02	7.02	148.88	0.10	2.02	7.02	148.88		
Below zero.	3.83	202.39	194.51	0.00	168.13	6.00	141.13	Below zero.	2.17	6.93	41.50	8.08	11.07	1.87	2.02	7.02	148.88	0.10	2.02	7.02	148.88	0.10	2.02	7.02	148.88	0.10	2.02	7.02	148.88		
Below zero.	3.83	202.39	194.51	0.00	168.13	6.00	141.13	Below zero.	2.17	6.93	41.50	8.08	11.07	1.87	2.02	7.02	148.88	0.10	2.02	7.02	148.88	0.10	2.02	7.02	148.88	0.10	2.02	7.02	148.88		
Below zero.	3.83	202.39	194.51	0.00	168.13	6.00	141.13	Below zero.	2.17	6.93	41.50	8.08	11.07	1.87	2.02	7.02	148.88	0.10	2.02	7.02	148.88	0.10	2.02	7.02	148.88	0.10	2.02	7.02	148.88		
Below zero.	3.83	202.39	194.51	0.00	168.13	6.00	141.13	Below zero.	2.17	6.93	41.50	8.08	11.07	1.87	2.02	7.02	148.88	0.10	2.02	7.02	148.88	0.10	2.02	7.02	148.88	0.10	2.02	7.02	148.88		
Below zero.	3.83	202.39	194.51	0.00	168.13	6.00	141.13	Below zero.	2.17	6.93	41.50	8.08	11.07	1.87	2.02	7.02	148.88	0.10	2.02	7.02	148.88	0.10	2.02	7.02	148.88	0.10	2.02	7.02	148.88		
Below zero.	3.83	202.39	194.51	0.00	168.13	6.00	141.13	Below zero.	2.17	6.93	41.50	8.08	11.07	1.87	2.02	7.02	148.88	0.10	2.02	7.02	148.88	0.10	2.02	7.02	148.88	0.10	2.02	7.02	148.88		
Below zero.	3.83	202.39	194.51	0.00	168.13	6.00	141.13	Below zero.	2.17	6.93	41.50	8.08	11.07	1.87	2.02	7.02	148.88	0.10	2.02	7.02	148.88	0.10	2.02	7.02	148.88	0.10	2.02	7.02	148.88		
Below zero.	3.83	202.39	194.51	0.00	168.13	6.00	141.13	Below zero.	2.17	6.93	41.50	8.08	11.07	1.87	2.02	7.02	148.88	0.10	2.02	7.02	148.88	0.10	2.02	7.02	148.88	0.10	2.02	7.02	148.88		
Below zero.	3.83	202.39	194.51	0.00	168.13	6.00	141.13	Below zero.	2.17	6.93	41.50	8.08	11.07	1.87	2.02	7.02	148.88	0.10	2.02	7.02	148.88	0.10	2.02	7.02	148.88	0.10	2.02	7.02	148.88		
Below zero.	3.83	202.39	194.51	0.00	168.13	6.00	141.13	Below zero.	2.17	6.93	41.50	8.08	11.07	1.87	2.02	7.02	148.88	0.10	2.02	7.02	148.88	0.10	2.02	7.02	148.88	0.10	2.02	7.02	148.88		
Below zero.	3.83	202.39	194.51	0.00	168.13	6.00	141.13	Below zero.	2.17	6.93	41.50	8.08	11.07	1.87	2.02	7.02	148.88	0.10	2.02	7.02	148.88	0.10	2.02	7.02	148.88	0.10	2.02	7.02	148.88		
Below zero.	3.83	202.39	194.51	0.00	168.13	6.00	141.13	Below zero.	2.17	6.93	41.50	8.08	11.07	1.87	2.02	7.02	148.88	0.10	2.02	7.02	148.88	0.10	2.02	7.02	148.88	0.10	2.02	7.02	148.88		
Below zero.	3.83	202.39	194.51	0.00	168.13	6.00	141.13	Below zero.	2.17	6.93	41.50	8.08	11.07</																		

The 21st February 1888.

A. D McARTHUR, Major, R.E.,
Under-Secretary to Govt. of Bengal.

PUBLIC WORKS DEPARTMENT - BENGAL.

IRRIGATION BRANCH

Statement showing heights over mean sea-level and low water in the Rivers Ganges, Bhagurthee, Jellinghee, and Brahmapootra, for the month of May 1887.

		RIVER GANGES										RIVER JELLINGHEE		RIVER BRAHMAPOOTRA							
		Mirzapore		Benares		Buxar		Dinapore		Monghyr		Satehgee		Gual Indo		Bartampore		Satehgee		Gowhatti	
		88		14		43		177		287		181		120							
DATE.	Miles	From Allahabad		From Allahabad		From Allahabad		From Allahabad		From Allahabad		From Allahabad		From Allahabad							
		Height over zero of gauge	Height over mean sea-level	Height over zero of gauge	Height over mean sea-level	Height over zero of gauge	Height over mean sea-level	Height over zero of gauge	Height over mean sea-level	Height over zero of gauge	Height over mean sea-level	Height over zero of gauge	Height over mean sea-level	Height over zero of gauge	Height over mean sea-level	Height over zero of gauge	Height over mean sea-level	Height over zero of gauge	Height over mean sea-level	Height over zero of gauge	Height over mean sea-level
1st		4.00	201.72	8.95	103.45	0.92	16.13	7.95	141.48	3.00	68.10	2.12	2.12	6.53	1.11	1.11	1.11	1.11	1.11	1.11	1.11
2nd		4.08	201.80	8.97	103.53	0.94	16.15	7.97	141.50	3.02	68.12	2.14	2.14	6.55	1.13	1.13	1.13	1.13	1.13	1.13	1.13
3rd		4.16	201.88	9.00	103.61	0.97	16.17	8.00	141.52	3.05	68.14	2.17	2.17	6.58	1.16	1.16	1.16	1.16	1.16	1.16	1.16
4th		4.24	201.96	9.02	103.69	0.99	16.19	8.02	141.54	3.07	68.16	2.19	2.19	6.60	1.18	1.18	1.18	1.18	1.18	1.18	1.18
5th		4.32	202.04	9.05	103.77	1.02	16.21	8.05	141.56	3.10	68.18	2.22	2.22	6.63	1.21	1.21	1.21	1.21	1.21	1.21	1.21
6th		4.40	202.12	9.07	103.85	1.04	16.23	8.07	141.58	3.12	68.20	2.24	2.24	6.65	1.23	1.23	1.23	1.23	1.23	1.23	1.23
7th		4.48	202.20	9.10	103.93	1.07	16.25	8.10	141.60	3.15	68.22	2.27	2.27	6.68	1.26	1.26	1.26	1.26	1.26	1.26	1.26
8th		4.56	202.28	9.12	104.01	1.09	16.27	8.12	141.62	3.17	68.24	2.29	2.29	6.70	1.28	1.28	1.28	1.28	1.28	1.28	1.28
9th		4.64	202.36	9.15	104.09	1.12	16.29	8.15	141.64	3.20	68.26	2.32	2.32	6.73	1.31	1.31	1.31	1.31	1.31	1.31	1.31
10th		4.72	202.44	9.17	104.17	1.14	16.31	8.17	141.66	3.22	68.28	2.34	2.34	6.75	1.33	1.33	1.33	1.33	1.33	1.33	1.33
11th		4.80	202.52	9.20	104.25	1.17	16.33	8.20	141.68	3.25	68.30	2.37	2.37	6.78	1.36	1.36	1.36	1.36	1.36	1.36	1.36
12th		4.88	202.60	9.22	104.33	1.19	16.35	8.22	141.70	3.27	68.32	2.39	2.39	6.80	1.38	1.38	1.38	1.38	1.38	1.38	1.38
13th		4.96	202.68	9.25	104.41	1.22	16.37	8.25	141.72	3.30	68.34	2.42	2.42	6.83	1.41	1.41	1.41	1.41	1.41	1.41	1.41
14th		5.04	202.76	9.27	104.49	1.24	16.39	8.27	141.74	3.32	68.36	2.44	2.44	6.85	1.43	1.43	1.43	1.43	1.43	1.43	1.43
15th		5.12	202.84	9.30	104.57	1.27	16.41	8.30	141.76	3.35	68.38	2.47	2.47	6.88	1.46	1.46	1.46	1.46	1.46	1.46	1.46
16th		5.20	202.92	9.32	104.65	1.29	16.43	8.32	141.78	3.37	68.40	2.49	2.49	6.90	1.48	1.48	1.48	1.48	1.48	1.48	1.48
17th		5.28	203.00	9.35	104.73	1.32	16.45	8.35	141.80	3.40	68.42	2.52	2.52	6.93	1.51	1.51	1.51	1.51	1.51	1.51	1.51
18th		5.36	203.08	9.37	104.81	1.34	16.47	8.37	141.82	3.42	68.44	2.54	2.54	6.95	1.53	1.53	1.53	1.53	1.53	1.53	1.53
19th		5.44	203.16	9.40	104.89	1.37	16.49	8.40	141.84	3.45	68.46	2.57	2.57	6.98	1.56	1.56	1.56	1.56	1.56	1.56	1.56
20th		5.52	203.24	9.42	104.97	1.39	16.51	8.42	141.86	3.47	68.48	2.59	2.59	7.00	1.58	1.58	1.58	1.58	1.58	1.58	1.58
21st		5.60	203.32	9.45	105.05	1.42	16.53	8.45	141.88	3.50	68.50	2.62	2.62	7.03	1.61	1.61	1.61	1.61	1.61	1.61	1.61
22nd		5.68	203.40	9.47	105.13	1.44	16.55	8.47	141.90	3.52	68.52	2.64	2.64	7.05	1.63	1.63	1.63	1.63	1.63	1.63	1.63
23rd		5.76	203.48	9.50	105.21	1.47	16.57	8.50	141.92	3.55	68.54	2.67	2.67	7.08	1.66	1.66	1.66	1.66	1.66	1.66	1.66
24th		5.84	203.56	9.52	105.29	1.49	16.59	8.52	141.94	3.57	68.56	2.69	2.69	7.10	1.68	1.68	1.68	1.68	1.68	1.68	1.68
25th		5.92	203.64	9.55	105.37	1.52	16.61	8.55	141.96	3.60	68.58	2.72	2.72	7.13	1.71	1.71	1.71	1.71	1.71	1.71	1.71
26th		6.00	203.72	9.57	105.45	1.54	16.63	8.57	141.98	3.62	68.60	2.74	2.74	7.15	1.73	1.73	1.73	1.73	1.73	1.73	1.73
27th		6.08	203.80	9.60	105.53	1.57	16.65	8.60	142.00	3.65	68.62	2.77	2.77	7.18	1.76	1.76	1.76	1.76	1.76	1.76	1.76
28th		6.16	203.88	9.62	105.61	1.59	16.67	8.62	142.02	3.67	68.64	2.79	2.79	7.20	1.78	1.78	1.78	1.78	1.78	1.78	1.78
29th		6.24	203.96	9.65	105.69	1.62	16.69	8.65	142.04	3.70	68.66	2.82	2.82	7.23	1.81	1.81	1.81	1.81	1.81	1.81	1.81
30th		6.32	204.04	9.67	105.77	1.64	16.71	8.67	142.06	3.72	68.68	2.84	2.84	7.25	1.83	1.83	1.83	1.83	1.83	1.83	1.83
31st		6.40	204.12	9.70	105.85	1.67	16.73	8.70	142.08	3.75	68.70	2.87	2.87	7.28	1.86	1.86	1.86	1.86	1.86	1.86	1.86

A. D. McARTHUR, Major, R.E.,
Under-Secretary to the Government of Bengal.

The 21st February 1888

CIRCULAR AND EASTERN CANALS.

Approximate Return of Traffic for the week ending Saturday, the 1st February 1888, as compared with the corresponding week of the previous year

NATURE OF CARGO	WEEK ENDING SATURDAY THE 1st FEBRUARY 1888			WEEK ENDING SATURDAY THE 1st FEBRUARY 1887		
	Number of boats	Weight of cargo	Value	Number of boats	Weight of cargo	Value
	No	Mds	Rs	No	Mds	Rs
Rice and paddy	1 000	4 08 131	7 000	1 699	3 00 100	6 303
Jute	164	17 000	1,108	92	57 115	1 036
Firewood	120	00 010	011	100	91,795	1 301
Other articles	100	2 5760	3902	1015	2,48,960	3 807
Total	3,279	7 01 970	13 411	2,906	7,67,071	12 597

Weekly Return of Traffic Receipts on Indian Railways.

EAST INDIAN RAILWAY

Approximate Return of Traffic for week ended 11th February 1888, on 1513 miles open.

	COACHING TRAFFIC		MERCHANDISE AND MINERAL TRAFFIC		OIL RECEIPTS (Estimated)	Total Receipts	TRAFFIC TRAIN MILES RUN		
	Number of passengers	Carriage Fares	Weight Carried	Receipts			Carriage	Mineral	Total.
Total traffic for the week per mile of railway for previous 5 weeks of half year	711	Rs. 20 11 9	571 114	Rs. 1 1 1 1	Rs. 111 0 1 1 1	Rs. 1 8 1 18	110 7	176 320	
Total for 6 weeks	1,448	1 13 4 1	1 10 13 0	1 7 11 11	1 13 0	1 1 8 1	1 11 007	8 1 506	
COMPARISON									
Total for corresponding week of previous year	1 14	3 11 11 11	5 1 3 3	7 0 1 7 1	18 7 8 7	10 1 9 1 0	11 14	181 009	
Per mile of railway corresponding week of previous year		24 11 8		1	1 8 1	1 0 1			
Total to corresponding date of previous year	1 0 1	1 00 5 2 8	1 1 0 10	10 61 8 3	1 1 17 4 7	5 1 410 10 6	11 7	1 076 272	

Approximate Statement of gross receipts of the East Indian Railway prepared in accordance with Public Works Department Circular No. A.XI, Railway, dated 23rd July 1883.

RECEIPTS FOR WEEK ENDING 11th FEBRUARY 1887			RECEIPTS FOR WEEK ENDING 11th FEBRUARY 1888			TOTAL RECEIPTS FROM 1st APRIL 1887 TO 11th FEBRUARY 1887			TOTAL RECEIPTS FROM 1st APRIL 1887 TO 11th FEBRUARY 1888			Total increase in 1888	Total decrease in 1888
Mean mileage worked.	Receipts	Per mile worked	Mean mileage worked	Receipts	Per mile worked	Mean mileage worked	Total receipts	Per mile worked	Mean mileage worked	Total receipts	Per mile worked		
Rs.	Rs.		Rs.	Rs.		Rs.	Rs.		Rs.	Rs.			Rs.
1510	10 47 000	1 00	1 11 1	10,181 3	18	1 10	4 02 06,138	1 0	1 14	10 11 10*	1 80		6 52,113

* Added Rs. 30,000 on account of difference between the approximate and audited returns up to 31st December 1887.

PATNA-GYA STATE RAILWAY

Approximate Return of Traffic for week ended 11th February 1888, on 57 miles open.

	COACHING TRAFFIC		MERCHANDISE AND MINERAL TRAFFIC		Oil Receipts (estimated)	Total Receipts	TRAFFIC TRAIN MILES RUN		
	Number of passengers	Carriage fares	Weight carried	Receipts			Carriage	Mineral	Total
		Rs. A. P.	Mt. C. S.	R. A. P.	Rs. A. P.	Rs. A. P.			
Total traffic for the week	1431	8 12 14 0	35 505 0	1 0	13 10 0	10 8 2 10 0	1 0	1	2 304
Or per mile of railway	250	1 10 2	1 2 0	8 13 10	0 1 3	1 1 3			
For previous 5 weeks of half year	60 1 8	11 0 14 4 0	1 1 272 0	10 13 0 0	1 1 13 0	10 8 1 1 0	1 13	1	1 1 198
Total for 6 weeks	80,111	11 707 2 6	04 810 30	12 8 2 0	1 03 7 0	1 1 11 0	1 0	1	1 1 192
COMPARISON.									
Total for corresponding week of previous year	11,701	9 519 7 2	61 540 10	3 0 6 1 0	1 1 14 0	13 1 8	1 0	1 0 1	2 735
Per mile of railway corresponding week of previous year	292	1 10 6 10	1 672 20	1 1 1 1	0 13 11	1 1 1 3			
Total to corresponding date of previous year	78 180	41 588 5 1	2 57 307 0	18 137 5 0	310 4 6	10 1 11 7	1 0	1 0 8	13 587

Approximate Statement of gross receipts of the Patna-Gya State Railway, prepared in accordance with Public Works Department Circular No. A.XI, Railway, dated 23rd July 1883.

RECEIPTS FOR WEEK ENDING 12th FEBRUARY 1887.			RECEIPTS FOR WEEK ENDING 11th FEBRUARY 1888.			TOTAL RECEIPTS FROM 1st APRIL 1887 TO 11th FEBRUARY 1887			TOTAL RECEIPTS FROM 1st APRIL 1887 TO 11th FEBRUARY 1888			Total increase in 1888	Total decrease in 1888
Mean mileage worked.	Receipts	Per mile worked	Mean mileage worked	Receipts	Per mile worked	Mean mileage worked	Total receipts	Per mile worked	Mean mileage worked	Total receipts	Per mile worked		
Rs.	Rs.		Rs.	Rs.		Rs.	Rs.		Rs.	Rs.			Rs.
57	13,236	231	57	10 880	180	57	4,63 196	180	57	1 1 781*	1 70		26,055

* Added Rs. 1,230 on account of difference between the approximate and audited returns up to 31st December 1887.

DILDARNAGAR-GHAZIPUR STATE RAILWAY

Approximate Return of Traffic for week ended 11th February 1888, on 12 miles open

	COACHING TRAFFIC.		MERCHANDISE AND MINERAL TRAFFIC.		Other earnings (estimated).	Total earnings	TRAFFIC TRAIN-MILES RUN		
	Number of passengers	Coaching receipts	Weight carried	Receipts			Coaching	Merchandise	Total
		Rs. A. P.	Mds. s.	Rs. A. P.	Rs. A. P.	Rs. A. P.			
Total traffic for the week	2,457	411 9 0	14,496 20	308 1 0	12 12 0	732 5 0	374½	159	408
Or per mile of railway		34 4 8		25 10 9	1 1 0	61 0 5			
For previous 5 weeks of half-year	10,811	2,852 3 0	1,231 12 20	2,263 12 0	50 10 0	5,166 9 0	1,705½	702	2,407
Total for 6 weeks	10,298	3,263 11 0	1,345 13 0	2,571 13 0	63 6 0	5,898 14 0	2,040	921	2,961
COMPARISON.									
Total for corresponding week of previous year	3,065½	610 0 2	31 12 2	707 13 0	6 2 3	1,323 15 5	308	165	406
Per mile of railway corresponding week of previous year		50 13 4		58 15 9	0 8 2	110 5 3			
Total to corresponding date of previous year	17,870½	2,995 0 0	1,739 1 0	3,105 12 0	30 6 3	6,131 3 0	2,564	905	3,023

Approximate Statement of gross receipts of the Dildarnagar-Ghazipur State Railway, prepared in accordance with Public Works Department Circular No. XXI, Railway, dated 23rd July 1883

RECEIPTS FOR WEEK ENDING 12TH FEBRUARY 1887			RECEIPTS FOR WEEK ENDING 11TH FEBRUARY 1888.			TOTAL RECEIPTS FROM 1ST APRIL 1886 TO 12TH FEBRUARY 1887			TOTAL RECEIPTS FROM 1ST APRIL 1887 TO 11TH FEBRUARY 1888.			Total increase in 1888	Total decrease in 1888
Mean mileage worked.	Receipts.	Per mile worked	Mean mileage worked	Receipts.	Per mile worked	Mean mileage worked	Total receipts.	Per mile worked per week	Mean mileage worked	Total receipts.	Per mile worked per week	Rs.	
	Rs.	Rs.		Rs.	Rs.		Rs.	Rs.		Rs.	Rs.		
12	1,324	110	12	732	61	12	41,271	76	12	41,426*	77	15.	...

* Added Rs. 156 on account of difference between the approximate and audited returns up to 31st December 1887

SINDIA STATE RAILWAY

Approximate Return of Traffic for week ended 11th February 1888, on 74½ miles open.

	COACHING TRAFFIC.		MERCHANDISE AND MINERAL TRAFFIC.		Other earnings (estimated).	Total earnings	TRAFFIC TRAIN-MILES RUN		
	Number of passengers	Coaching receipts	Weight carried	Receipts.			Coaching.	Merchandise	Total
		Rs. A. P.	Mds. s.	Rs. A. P.	Rs. A. P.	Rs. A. P.			
Total traffic for the week	5,077	3,519 14 0	93,093 20	3,960 12 0	28 12 0	7,659 6 0	647	1,400½	1,571
Or per mile of railway		48 6 4		52 15 2	1 0 10	100 6 4			
For previous 5 weeks of half-year	2,744	17,347 0 0	4,36,002 6	22,911 7 0	1 1 0	40,739 8 0	3,307½	8,127	11,434½
Total for 6 weeks	27,821	20,966 14 0	6,29,095 20	26,772 7 0	610 13 0	48,398 14 0	8,951½	9,617½	13,571½
COMPARISON.									
Total for corresponding week of previous year	5,694½	4,161 14 2	1,73,291 20	5,611 3 0	91 5 3	9,864 6 5	815	1,198	2,013
Per mile of railway corresponding week of previous year		55 10 3		75 0 3	1 3 6	131 14 0			
Total to corresponding date of previous year	31,783	25,659 2 1	6,61,834 0	34,510 15 0	549 0 6	60,718 1 7	4,607	7,755	12,833

Approximate Statement of gross receipts of the Sindia State Railway, prepared in accordance with Public Works Department Circular No. XXI, Railway, dated 23rd July 1883.

RECEIPTS FOR WEEK ENDING 12TH FEBRUARY 1887.			RECEIPTS FOR WEEK ENDING 11TH FEBRUARY 1888.			TOTAL RECEIPTS FROM 1ST APRIL 1886 TO 12TH FEBRUARY 1887.			TOTAL RECEIPTS FROM 1ST APRIL 1887 TO 11TH FEBRUARY 1888.			Total increase in 1888.	Total decrease in 1888.
Mean mileage worked.	Receipts.	Per mile worked	Mean mileage worked	Receipts.	Per mile worked	Mean mileage worked	Total receipts.	Per mile worked per week	Mean mileage worked	Total receipts.	Per mile worked per week.		
	Rs.	Rs.		Rs.	Rs.		Rs.	Rs.		Rs.	Rs.	Rs.	
74½	9,864	132	74½	7,659	102	74½	3,45,612	103	74½	8,53,005*	114	37,483	...

* Added Rs. 204 on account of difference between the approximate and audited returns up to 31st December 1887.

TARKESSUR BRANCH RAILWAY.

Approximate Return of Traffic for week ended 11th February 1888, on 22½ miles open.

	COACHING TRAFFIC.		MERCHANDISE AND MINERAL TRAFFIC.		Other earnings (estimated).	Total earnings.	TRAFFIC TRAIN-MILES RUN.		
	Number of passengers.	Coaching receipts.	Weight carried.	Receipts.			Coaching.	Merchandise.	Total.
		Rs. A. P.	Mds. s.	Rs. A. P.	Rs. A. P.	Rs. A. P.			
Total traffic for the week ...	30,002	8,412 2 0	8,813 10	324 13 0	6 0 0	8,742 15 0	1,004	96	1,100
Or per mile of railway ...	.....	378 1 2	.....	14 9 7	0 4 4	392 15 1	.....	.....	.....
For previous 5 weeks of half-year ...	96,869	24,307 3 0	37,706 0	1,242 2 0	20 14 0	25,579 3 0	4,477	303	4,840
Total for 6 weeks ...	1,26,931	32,719 5 0	46,609 10	1,566 15 0	35 14 0	31,822 2 0	5,481	459	5,940
COMPARISON.									
Total for corresponding week of previous year ...	25,795†	6,690 12 5	10,798 20	364 10 0	0 6 3	7,001 12 8	912	56	968
Per mile of railway corresponding week of previous year ...	.....	300 11 4	.....	10 0 3	0 4 7	317 6 2	.....	.....	.....
Total to corresponding date of previous year ...	1,11,891	28,379 5 3	40,509 10	1,525 0 0	37 2 6	29,941 13 9	5,743	263	6,006

Approximate Statement of gross receipts of the Tarkessur Branch Railway, prepared in accordance with Public Works Department Circular No. XXI, Railway, dated 23rd July 1883.

RECEIPTS FOR WEEK ENDING 12TH FEBRUARY 1887.			RECEIPTS FOR WEEK ENDING 11TH FEBRUARY 1888.			TOTAL RECEIPTS FROM 1ST APRIL 1886 TO 12TH FEBRUARY 1887.			TOTAL RECEIPTS FROM 1ST APRIL 1887 TO 11TH FEBRUARY 1888.			Total increase in 1888.	Total decrease in 1888.
Mean mileage worked.	Receipts.	Per mile worked.	Mean mileage worked.	Receipts.	Per mile worked.	Mean mileage worked.	Total receipts.	Per mile worked per week.	Mean mileage worked.	Total receipts.	Per mile worked per week.		
	Rs.	Rs.		Rs.	Rs.		Rs.	Rs.		Rs.	Rs.	Rs.	
22½	7,062	317	22½	8,743	393	22½	2,06,614	206	22½	2,27,510*	227	20,866	.....

* Deducted Rs. 189 on account of difference between the approximate and audited returns up to 31st December 1887.

EASTERN BENGAL STATE RAILWAY.

(INCLUDING N. B. Dacca, K. and D., and ASSAM-BEHAR SECTIONS).

Approximate Return of Traffic for week ended 4th February 1888, on 645 miles open.

	COACHING TRAFFIC.		MERCHANDISE AND MINERAL TRAFFIC.		Other earnings (estimated), including Steam-boat.	Total earnings.	TRAFFIC TRAIN-MILES RUN.		
	Number of passengers.	Coaching receipts.	Weight carried.	Receipts.			Coaching.	Merchandise.	Total.
		Rs. A. P.	Mds. s.	Rs. A. P.	Rs. A. P.	Rs. A. P.			
Total traffic for the week ...	146,719	80,751 0 0	4,75,285 0	80,635 0 0	13,148 0 0	1,80,584 0 0	22,314	20,132	42,446
Or per mile of railway ...	227	125 0 0	737 0	134 0 0	2 0 0†	261 0 0	.....	.....	.....
For previous 4 weeks of half-year ...	481,221	2,62,124 0 0	22,02,048 0	4,18,211 0 0	50,152 0 0	7,46,487 0 0	86,158	99,656	176,814
Total for 5 weeks ...	627,940	3,49,875 0 0	26,77,333 0	5,04,896 0 0	72,300 0 0	2,27,071 0 0	108,472	1,07,788	216,260
COMPARISON.									
Total for corresponding week of previous year ...	170,695*	78,643 0 0	5,41,607 0	1,01,490 0 0	13,878 0 0	1,99,011 0 0	19,704	23,223	42,927
Per mile of railway corresponding period of previous year ...	281	122 0 0	804 0	167 0 0	2 0 0†	291 0 0	.....	.....	.....
Total to corresponding date of previous year ...	682,785	3,14,311 0 0	27,90,297 0	4,42,981 0 0	61,601 0 0	8,18,803 0 0	99,737	109,753	209,490

* 42,800 monthly tickets.

† Excluding steamers' earnings.

FINANCIAL YEAR.

Approximate Statement of gross receipts of the Eastern Bengal State Railway.

RECEIPTS FOR WEEK ENDING 5TH FEBRUARY 1887.			RECEIPTS FOR WEEK ENDING 4TH FEBRUARY 1888.			TOTAL RECEIPTS FROM 1ST APRIL 1886 TO 5TH FEBRUARY 1887.			TOTAL RECEIPTS FROM 1ST APRIL 1887 TO 4TH FEBRUARY 1888.			Total increase in 1887-88.	Total decrease in 1887-88.
Mean mileage worked.	Receipts.	Per mile worked.	Mean mileage worked.	Receipts.	Per mile worked.	Mean mileage worked.	Total receipts.	Per mile worked per week.	Mean mileage worked.	Total receipts.	Per mile worked per week.		
	Rs.	Rs.		Rs.	Rs.		Rs.	Rs.		Rs.	Rs.	Rs.	
645	1,99,011	319	645	1,90,584	280	608	71,23,963	267	645	82,15,536*	269	10,91,573	.....

* Audited up to 24th December 1887.

BENGAL CENTRAL RAILWAY.

Approximate Return of Traffic for week ended 4th February 1888, on 125 miles open.

	COACHING TRAFFIC		MERCHANDISE AND MINERAL TRAFFIC		Other earnings (estimated)	Total earnings	TRAFFIC TRAIN-MILES RUN		
	Number of passengers	Coaching receipts	Weight carried	Receipts			Coaching	Merchandise	Total
		Rs A P	Mds s	Rs A P	Rs A P	Rs A P			
Total traffic for the week	31,270	9,117 0 0	55,201 0	5,368 0 0	10 0 0	15,031 0 0	3,500	1,710	5,210
Or per mile of railway	250	77 0 0	442 0	43 0 0		120 0 0			
For previous 4 weeks of half-year	88,111	27,479 0 0	1,03,201 0	15,025 0 0	220 0 0	48,724 0 0	14,003	6,837	20,840
Total for 5 weeks	119,381	44,596 0 0	2,18,402 0	20,393 0 0	270 0 0	63,755 0 0	17,503	8,647	26,050
COMPARISON									
Total for corresponding week of previous year	22,101	9,219 0 0	31,077 0	2,010 0 0	7 0 0	11,355 0 0	3,457	1,753	5,210
Per mile of railway corresponding period of previous year	177	74 0 0	249 0	16 0 0	1 0 0	91 0 0			
Total to corresponding date of previous year	113,996	42,021 0 0	1,31,744 0	8,480 0 0	241 0 0	50,142 0 0	18,814	8,906	26,820

FINANCIAL YEAR.

Approximate Statement of gross receipts of the Bengal Central Railway

RECEIPTS FOR WEEK ENDING 5TH FEBRUARY 1887			RECEIPTS FOR WEEK ENDING 4TH FEBRUARY 1888			TOTAL RECEIPTS FROM 1ST APRIL 1887 TO 5TH FEBRUARY 1887			TOTAL RECEIPTS FROM 1ST APRIL 1887 TO 4TH FEBRUARY 1888			Total increase in 1887-88	Total decrease in 1887-88
Mean mileage worked	Receipts	Per mile worked	Mean mileage worked	Receipts	Per mile worked	Mean mileage worked	Total receipts	Per mile worked	Mean mileage worked	Total receipts	Per mile worked	Rs	
	Rs	Rs		Rs	Rs		Rs	Rs		Rs	Rs		
125	11,453	91	125	1,031	120	125	4,713 32	87	125	5,58,988*	102	79,656	

* Audited up to week ending 24th December 1887.

DACCRA STATE RAILWAY

Approximate Return of Traffic for week ended 4th February 1888 on 86 miles open.

	COACHING TRAFFIC		MERCHANDISE AND MINERAL TRAFFIC		Other earnings (estimated)	Total earnings	TRAFFIC TRAIN-MILES RUN		
	Number of passengers	Coaching receipts	Weight carried	Receipts			Coaching	Merchandise	Total
		Rs A P	MDS S	Rs A P	Rs A P	Rs A P			
Total traffic for the week	13 235	4 831 0 0	12 800 0	1 132 0 0	40 0 0	5 895 0 0	2 001	963	2 964
Or per mile of railway	154	56 0 0	149 0	12 0 0		68 0 0		..	..
For previous 4 weeks of half-year	50 202	22 222 0 0	94 435 0	8 311 0 0	210 0 0	30 740 0 0	8 105	3 681	11 856
Total for 5 weeks	63 427	27 055 0 0	1 16 235 0	9 443 0 0	250 0 0	36 641 0 0	10 106	4 654	14 820
COMPARISON									
Total for corresponding week of previous year	13 200	4 634 0 0	20 845 0	2 531 0 0	132 0 0	7 311 0 0	1 968	1 769	3 748
Per mile of railway corresponding period of previous year	154	54 0 0	243 0	29 0 0	2 0 0	85 0 0	.. ..	.. ..	.
Total to corresponding date of previous year	61 534	23 025 0 0	1 12 005 0	10 225 0 0	1 032 0 0	34 282 0 0	10 933	6 945	17 978

FINANCIAL YEAR.

Approximate Statement of gross receipts of the Dacca State Railway

RECEIPTS FOR WEEK ENDING 5TH FEBRUARY 1887			RECEIPTS FOR WEEK ENDING 4TH FEBRUARY 1888			TOTAL RECEIPTS FROM 1ST APRIL 1887 TO 5TH FEBRUARY 1887			TOTAL RECEIPTS FROM 1ST APRIL 1887 TO 4TH FEBRUARY 1888			Total increase in 1887-88	Total decrease in 1887-88
Mean mileage worked	Receipts	Per mile worked	Mean mileage worked	Receipts	Per mile worked	Mean mileage worked	Total receipts	Per mile worked	Mean mileage worked	Total receipts	Per mile worked	Rs	
	Rs	Rs		Rs	Rs		Rs	Rs		Rs	Rs		
86	7,301	85	86	5,805	68	86	2,29,595	61	86	2,62,410*	69	32,815	....

* Audited up to week ending 24th December 1887.

ASSAM-BEHAR STATE RAILWAY.

(PUANEH SECTION.)

Approximate Return of Traffic for week ended 4th February 1888, on 39 miles open.

	COACHING TRAFFIC.		MERCHANDISE AND MINERAL TRAFFIC.		Other earnings (estimated).	Total earnings.	TRAFFIC TRAIN-MILES RUN.		
	Number of passengers.	Coaching receipts.	Weight carried.	Receipts.			Coaching.	Merchandise.	Total.
		Rs. A. P.	Mds. S.	Rs. A. P.	Rs. A. P.	Rs. A. P.			
Total traffic for the week ...	3,945	1,426 0 0	18,206 0	1,713 0 0	20 0 0	3,159 0 0	546	546	1,092
Or per mile of railway ...	101	37 0 0	468 0	44 0 0	.....	81 0 0	.....	.....	.....
For previous 4 weeks of half-year ...	11,988	4,374 0 0	66,025 0	6,259 0 0	55 0 0	10,688 0 0	2,184	2,184	4,368
Total for 5 weeks ...	15,933	5,800 0 0	84,291 0	7,972 0 0	75 0 0	13,847 0 0	2,730	2,730	5,460
COMPARISON.									
Total for corresponding week of previous year ...	.....	.....	.....	.....	.....	.....	.....	.....	.....
Per mile of railway corresponding period of previous year ...	.....	.....	.....	.....	.....	.....	.....	.....	.....
Total to corresponding date of previous year ...	.....	.....	.....	.....	.....	.....	.....	.....	.....

FINANCIAL YEAR.

Approximate Statement of gross receipts of the Assam-Bihar State Railway.

RECEIPTS FOR WEEK ENDING 5TH FEBRUARY 1887.			RECEIPTS FOR WEEK ENDING 4TH FEBRUARY 1888.			TOTAL RECEIPTS FROM 1ST APRIL 1886 TO 5TH FEBRUARY 1887.			TOTAL RECEIPTS FROM 1ST APRIL 1887 TO 4TH FEBRUARY 1888.			Total increase in 1887-88.	Total decrease in 1887-88.
Mean mileage worked.	Receipts.	Per mile worked.	Mean mileage worked.	Receipts.	Per mile worked.	Mean mileage worked.	Total receipts.	Per mile worked per week.	Mean mileage worked.	Total receipts.	Per mile worked per week.		
	Rs.	Rs.		Rs.	Rs.		Rs.	Rs.		Rs.	Rs.	Rs.	
.....	.....	.....	39	3,159	81	.....	.....	.....	39	1,61,110*	59	1,01,110	.....

* Audited up to week ending 24th December 1887.

NALHATI STATE RAILWAY.

Approximate Return of Traffic for the week ending 11th February 1888, on 27½ miles open.

	COACHING TRAFFIC.		MERCHANDISE AND MINERAL TRAFFIC.		Other earnings (estimated).	Total earnings.	TRAFFIC TRAIN-MILES RUN.		
	Number of passengers.	Coaching receipts.	Weight carried.	Receipts.			Coaching.	Merchandise.	Total.
		Rs. A. P.	Mds. S.	Rs. A. P.	Rs. A. P.	Rs. A. P.			
Total traffic for the week ...	3,788	1,323 0 0	13,840 0	644 0 0	18 0 0	1,985 0 0	599	254	763
Or per mile of railway ...	139	48 9 0	508 0	23 10 0	0 10 0	72 13 0	.....	.....	.....
For previous 5 weeks of half-year ...	15,159	5,557 0 0	94,523 0	4,711 0 0	79 0 0	10,347 0 0	2,545	2,261½	4,806½
Total for 5 weeks ...	18,947	6,880 0 0	1,08,363 0	5,355 0 0	97 0 0	12,342 0 0	3,054	2,515½	5,569½
COMPARISON.									
Total for corresponding week of previous year ...	3,423½	1,266 7 5	10,412 30	525 13 0	20 8 0	1,806 12 5	599	278½	787½
Per mile of railway corresponding week of previous year ...	126	40 4 0	382 0	19 5 0	0 12 0	66 5 0	.....	.....	.....
Total to corresponding date of previous year ...	17,470	6,466 9 4	86,406 30	4,590 0 0	168 2 6	11,224 11 10	3,126	1,975	5,101

FINANCIAL YEAR.

Approximate Statement of gross receipts of the Nalhati State Railway.

RECEIPTS FOR WEEK ENDING 15TH FEBRUARY 1887.			RECEIPTS FOR WEEK ENDING 11TH FEBRUARY 1888.			TOTAL RECEIPTS FROM 1ST APRIL 1886 TO 15TH FEBRUARY 1887.			TOTAL RECEIPTS FROM 1ST APRIL 1887 TO 11TH FEBRUARY 1888.			Total increase in 1887-88.	Total decrease in 1887-88.
Mean mileage worked.	Receipts.	Per mile worked.	Mean mileage worked.	Receipts.	Per mile worked.	Mean mileage worked.	Total receipts.	Per mile worked per week.	Mean mileage worked.	Total receipts.	Per mile worked per week.		
	Rs.	Rs.		Rs.	Rs.		Rs.	Rs.		Rs.	Rs.	Rs.	
27½	1,807	66	27½	1,985	73	27½	73,736	60	27½	80,476	66	6,742	.....

TIRHOOT STATE RAILWAY

Approximate Return of Traffic for the week ending 11th February 1888, on 259 miles open.

	COACHING TRAFFIC.		MERCHANDISE AND MINERAL TRAFFIC		Other earnings (estimated).	Total earnings.	TRAFFIC TRAIN-MILES RUN.		
	Number of passengers	Coaching receipts	Weight carried	Receipts.			Coaching.	Merchandise	Total
Total traffic for the week on 259 miles open	41,387	Rs. A. P. 16,238 0 0	Mds 8 2,20,775 0	Rs. A. P. 22,314 0 0	Rs. A. P. 4,355 0 0	Rs. A. P. 42,927 0 0	0,288	9,370	13,658
Or per mile of railway	159	62 11 0	852 0	86 4 0	2 15 0	161 14 0*	...	...	...
For previous 5 weeks of half year	217,784	86,501 0 0	9,58,495 0	94,763 0 0	20,002 0 0	2,02,456 0 0	34,485	39,710	74,175
Total for 6 weeks	259,071	1,02,539 0 0	11,77,270 0	1,17,007 0 0	21,117 0 0	2,11,983 0 0	40,748	49,080	89,828
COMPARISON									
Total for corresponding week of previous year on 246 miles open	64,545	27,547 4 4	1,40,833 10	13,602 5 0	2,091 0 0	43,149 9 4	7,108	5,870	13,047
Per mile of railway corresponding week of previous year	262	112 0 0	572 0	54 14 0	1 1 0	167 15 0*	...	...	...
Total to corresponding date of previous year	237,582	96,154 8 8	8,81,380 0	86,516 10 0	16,988 6 9	1,91,689 9 5	34,425	30,433	64,858

* Steam-boat earnings excluded in calculating Total earnings per mile of Railway

(a) The *Maghi Purnamashi* m/s took place later in this week of the previous year hence the decrease under this head.

FINANCIAL YEAR

Approximate Statement of gross receipts of the Tirhoot State Railway.

RECEIPTS FOR WEEK ENDING 12TH FEBRUARY 1887.			RECEIPTS FOR WEEK ENDING 11TH FEBRUARY 1888			TOTAL RECEIPTS FROM 1ST APRIL 1887 TO 11TH FEBRUARY 1887			TOTAL RECEIPTS FROM 1ST APRIL 1887 TO 11TH FEBRUARY 1888			Total increase in 1887-88	Total decrease in 1887-88
Mean mileage worked	Receipts	Per mile worked	Mean mileage worked	Receipts	Per mile worked	Mean mileage worked	Total receipts	Per mile worked per week	Mean mileage worked	Total receipts	Per mile worked per week	Rs.	
Rs.	Rs.		Rs.	Rs.		Rs.	Rs.		Rs.	Rs.			
246	43,143	175	259	41,927	166	246	13,68,429	124	251 58	15,17,047	137	1,81,218	...

DARJEELING-HIMALAYAN RAILWAY COMPANY, LIMITED.

Rs.

Approximate earnings for week ending 4th February 1888	...	5,323
Corresponding week last year	...	5,686
Decrease	...	363
Receipts from 1st January to 4th February 1888	...	29,365
From 1st January to 6th February 1887	...	26,176
Increase	...	3,189
Miles open, week ending 4th February 1888	...	51
Corresponding week last year	...	51
Receipts per mile open, week ending 4th February 1888	...	104 6 0
Corresponding week last year	...	111 7 11
Decrease	...	7 1 11

DARJEELING, the 13th February 1888.

H. BROWN, Acting Secretary, D.H. Ry.



SUPPLEMENT TO The Calcutta Gazette.

WEDNESDAY, FEBRUARY 29, 1888.

OFFICIAL PAPERS.

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GRANT TO THE BEHAR SANSKRIT SANJIVAN.

GENERAL DEPARTMENT—EDUCATION.

Calcutta, the 25th February 1888.

RESOLUTION.

READ—

A letter from the Director of Public Instruction, No. 8129, dated 29th December 1887, reporting the establishment at Bankipore of the Behar Sanskrit Sanjivan.

The Lieutenant-Governor is gratified to learn that an Association has been established at Bankipore, under the name of the Behar Sanskrit Sanjivan, with the object of encouraging the study of Sanskrit in Behar. The Association proposes to raise the tols of Behar, or a large proportion of them, to the standard of the annual Sanskrit Title Examination for students throughout Bengal, by instituting subordinate examinations and awarding prizes and scholarships, and the concomitant expenses have been estimated at Rs. 1,700 a year, of which Rs. 1,200 is expected to be raised by local subscriptions, while a Government grant to meet the balance is now asked for. The Lieutenant-Governor approves the scheme, and, as recommended by the Director of Public Instruction, is pleased to sanction an annual grant of Rs. 500 to the Behar Sanskrit Sanjivan with effect from the 1st April next, on condition that the sum of Rs. 1,200 is regularly contributed from private sources.

ORDER.—Ordered that a copy of this Resolution be forwarded to the Director of Public Instruction for information, and to the Financial Department of this office for information and communication to the Accountant-General.

Ordered also that a copy of this Resolution be published in the *Calcutta Gazette*.

By order of the Lieutenant-Governor of Bengal,
P. NOLAN,

Secretary to the Government of Bengal.

LIBERALITY OF BABOO BIROJA PROSAD BASU.

GENERAL DEPARTMENT—EDUCATION.

Calcutta, the 28th February 1888.

RESOLUTION.

READ—

Endorsement from the Commissioner of the Presidency Division, No. 3M.E., dated 6th January 1888, and its annexures, on the subject of a proposal by Baboo Biroja Prosad Basu, of Jessore, to make an endowment for the purpose of providing for the award of a silver medal in alternate years on the result of the University Entrance Examination.

Letter from the Director of Public Instruction, No. 1001, dated 18th February 1888, reporting on the above.

To perpetuate the memory of his deceased wife, Baboo Biroja Prosad Basu, a pleader of the Judge's Court, Jessore, has made over to the Magistrate of Jessore three Government Securities of the value of Rs. 100 each, from the interest of which it is proposed to award in alternate years a silver medal of the value of Rs. 12 to that student of the Taki and Jessore Government Schools who shall have passed highest at the Entrance Examination of the Calcutta University in the first division, or, in the event of there being no such student, to the student who stands first in the general Entrance Examination list of the University.

2. The Lieutenant-Governor is pleased to accept the endowment, and tenders his thanks to the founder for his liberality. The Director of Public Instruction will be the administrator of the fund, and the Government Securities should be endorsed to the Comptroller-General and forwarded to the Accountant-General, Bengal, for safe custody.

ORDER.—Ordered that a copy of this Resolution be forwarded to the Commissioner of the Presidency Division for information and communication to the donor, and to the Director of Public Instruction for information.

Ordered also that a copy of this Resolution be published in the *Calcutta Gazette*.

By order of the Lieutenant-Governor of Bengal,

P. NOLAN,

Secretary to the Government of Bengal.

REPORT ON THE STATE OF THE SALT MARKET FOR THE THIRD QUARTER OF 1887-88.

No. 108B, dated Calcutta, the 11th February 1888.

From—K. G. GUPTA, Esq., Offg. Secretary to the Board of Revenue, L.P.,

To—The Secretary to the Government of Bengal, Financial Department.

I AM directed by the Board of Revenue to submit the following report on the state of the salt market for the third quarter of 1887-88, comprising the months of October, November, and December 1887.

SALT.

F. B. PEACOCK, Esq.

2. The quantity of salt of every description cleared during the quarter under report amounted to 27,10,003 maunds 8 seers 2 chittacks against 24,04,508 maunds 23 seers 4 chittacks in the previous quarter, and 25,83,058 maunds 81 seers 10 chittacks in the corresponding quarter of the previous year; and the net amount of duty levied thereon was Rs. 50,56,522-2-8 against Rs. 45,13,822-8 in the previous quarter, and Rs. 47,95,125 in the corresponding quarter of the previous year.

3. The quantity of excise salt sold in the districts of Cuttack, Pooree and Balasore during the quarter under review from the stock of the different seasons' manufacture, and the quantities which remained in store at the close of the quarter, are shown in Table I:—

TABLE I.

	CUTTACK.					POOREE.				
	Manufacture of—					Manufacture of—				
	1884-85.	1885-86.	1886-87.	1880-81.	1882-83.	1883-84.	1884-85.	1885-86.	1886-87.	
	Mds. s. c.	Mds. s. c.	Mds. s. c.	Mds. s. c.	Mds. s. c.	Mds. s. c.	Mds. s. c.	Mds. s. c.	Mds. s. c.	
Balance at close of the last quarter.	2,234 5 0	4,113 0 0	12,639 16 0	321 0 0	5,135 18 0	3,010 29 10	32,373 35 0	510 0 0	83,275 20 0	
Manufactured or added during the quarter.	.....	.....	.....	.....	.....	.....	.....	.....	.....
Total	2,234 5 0	4,113 0 0	12,639 16 0	321 0 0	5,135 18 0	3,010 29 10	32,373 35 0	510 0 0	83,275 20 0	
Sales during the quarter	938 0 0	2,550 0 0	8,590 0 0	.....	1,437 35 0	763 10 0	7,353 0 0	235 0 0	30,063 0 0	
Wastage	.....	.....	1,364 16 0	.....	1,709 20 4	77 2 4	232 7 0	299 0 0	6,840 0 0	
Total	938 0 0	2,550 0 0	4,954 16 0	.....	3,147 15 4	1,537 12 4	7,584 7 0	464 0 0	45,932 0 0	
Balance at close of the quarter	1,296 5 0	1,563 0 0	7,685 0 0	321 0 0	1,988 2 12	1,473 17 6	24,789 28 0	46 0 0	37,343 20 0	

	BALASORE.						
	Manufacture of—						
	1879-80.	1880-81.	1881-82.	1883-84.	1884-85.	1885-86.	1886-87.
	Mds. s. c.	Mds. s. c.	Mds. s. c.	Mds. s. c.	Mds. s. c.	Mds. s. c.	Mds. s. c.
Balance at close of the last quarter.	623 25 0	2,909 10 8	2,831 17 11	3,614 3 0	3,979 30 0	14,516 15 0	464 15 0
Manufactured or added during the quarter.	.....	.....	.....	.....	.....	.....	.....
Total	623 25 0	2,909 10 8	2,831 17 11	3,614 3 0	3,979 30 0	14,516 15 0	464 15 0
Sales during the quarter	.....	.....	.....	.....	250 0 0	3,071 0 0	390 0 0
Wastage	.....	.....	.....	.....	.....	.....	.....
Total	.....	.....	.....	.....	250 0 0	3,071 0 0	390 0 0
Balance at close of the quarter	623 25 0	2,909 10 8	2,831 17 11	3,614 3 0	3,729 30 0	11,445 15 0	74 15 0

4. The above statement shows that the total sale of excise salt during the quarter under review amounted to 59,660 maunds 5 seers against 30,118 maunds in the previous quarter, and 30,403 maunds 10 seers in the corresponding quarter of the previous year.

5. The subjoined table shows in comparison the importations into the port of Calcutta, and the total clearances of sea-imported salt during the quarter under review and the corresponding quarters of the previous two years:—

TABLE II.

	1886-86.		1886-87.		1887-88.	
	Third quarter.		Third quarter.		Third quarter.	
	Imported.	Cleared.	Imported.	Cleared.	Imported.	Cleared.
	Mds.	Mds.	Mds.	Mds.	Mds.	Mds.
Liverpool pungah	16,43,802	17,88,860	17,07,568	15,70,078	15,97,615	18,16,109
Foreign karkutch	4,75,771	4,65,730	9,18,200	7,38,961	6,50,945	5,62,370
Indian ditto	82,200	1,44,849	1,60,451	1,52,817	1,54,951	1,57,000
Total	22,01,803	23,99,445	27,86,309	24,61,856	24,00,541	25,35,485

6. The following are the details of the Indian karkutch salt shown in the above table:—

TABLE III.

	1886-86.		1886-87.		1887-88.	
	Third quarter.		Third quarter.		Third quarter.	
	Imported.	Cleared.	Imported.	Cleared.	Imported.	Cleared.
	Mds.	Mds.	Mds.	Mds.	Mds.	Mds.
Bombay	82,200	1,44,849	1,60,451	1,52,817	1,54,951	1,57,000
Total	82,200	1,44,849	1,60,451	1,52,817	1,54,951	1,57,000

7. Table IV shows the quantity of sea-imported salt remaining in the warehouses at the close of the quarter as compared with the results of the previous four quarters:—

TABLE IV.

WHERE STORED.	Third quarter of 1886-87.	Fourth quarter of 1886-87.	First quarter of 1887-88.	Second quarter of 1887-88.	Third quarter of 1887-88.
	Mds.	Mds.	Mds.	Mds.	Mds.
Sulkea Government Golahs	10,53,923	8,07,682	8,07,700	7,86,071	9,86,779
Chittagong do. do.	79,300	93,180	63,223	1,22,105	1,68,566
Total	11,33,223	9,00,862	8,70,923	9,08,176	11,55,345

8. The despatches of salt from Calcutta by water and the three railways passing the several salt-pass stations into the interior of the country, both east and west of the river Hooghly, during the quarter under review, and the corresponding quarters of the previous two years, are shown in Table V:—

TABLE V.

PERIOD.	Via Balichall.	Via Sankrail.	Via Gowaikhali.	Via Kidderpore.	Via Ballighatta.	Via Rutherford Ghat.	By the East Indian Railway.	By the Eastern Bengal and South-Eastern Railways or via Chittpore.
	Mds.	Mds.	Mds.	Mds.	Mds.	Mds.	Mds.	Mds.
Third quarter of 1886-86 ...	3,02,985	1,51,190	93,506	80,093	5,19,297	1,30,643	9,86,515	1,03,741
Ditto of 1886-87 ...	3,24,117	1,46,110	95,379	59,825	4,62,515	1,10,464	9,92,029	1,34,781
Ditto of 1887-88 ...	2,78,488	1,51,951	1,03,293	76,700	5,20,644	10,095	9,18,381	1,90,910

9. The quantity of salt despatched by the East Indian Railway to stations beyond Buxar during the quarter under review amounted to 48,240 maunds, as noted in the margin, against 32,368 maunds 30 seers in the previous quarter, and 62,107 maunds in the corresponding quarter of the previous year.

	Mds
October	2 410
November	14,310
December	10 410
Total	48,240

10. The shipments of Liverpool salt for the port of Calcutta according to published market reports were as follows:—

					Tons.
October	..	...	..	...	20,350
November	...	...	...	...	4,300
December	...	...	...	...	18,860
					43,520

No shipments were reported during the quarter under review for the port of Chittagong.

11. Table VI shows the market price per 100 maunds of Liverpool and other descriptions of salt at the close of each fortnight during the quarter as compared with those obtaining during the same period last year:—

TABLE VI

DESCRIPTION OF SALT	Prices on the 15th October		Prices on the 31st October		Prices on the 15th November		Prices on the 30th November		Prices on the 15th December		Prices on the 31st December	
	1886	1887	1886	1887	1886	1887	1886	1887	1886	1887	1886	1887
	Rs	Rs	Rs.	Rs.	Rs	Rs	Rs	Rs	Rs	Rs	Rs	Rs.
Liverpool punnah	74	60	73	62	68	66	66	71	62	72	71	73
French kurkutch	46	5	46	53	46	51	41	53	45	52	45	52
Jedda ditto	48	52	44	51	44	52	45	52	45	51	41	50
Bombay ditto	42	50	41	50	45	40	45	48	45	48	45	48
Madras ditto												
Italian ditto	46	53	46	53	45	54	46	53	45	52	45	53
Muscat ditto	51	44	45	45	45	44	45	47	45	48	45	48
Ceylon ditto												
Rock	130	53	130	53	130	55	130	55	130	65	130	65

12. The following table shows the quantity of sea-imported salt admitted into bond and cleared from bond and shipboard at Chittagong and Cuttack during the quarter under review and the corresponding quarter of 1886-87 —

TABLE VII.

PORT.	DESCRIPTION OF SALT.	ADMITTED INTO BOND		C L E A R E D	
		Third quarter of 1886-87	Third quarter of 1887-88	Third quarter of 1886-87	Third quarter of 1887-88
		Mds s c	Mds. s. c	Mds s c	Mds s c
Chittagong	Liverpool	58 378 0 0	1,24 730 0 0	90,798 20 0	1 14 854 10 0
	British Burmah	..	..	0 24 0	0 4 0
	Jedda	..	..	..	0 23 0
	Madras	..	..	0 5 0	9 10 0
	Bombay	..	..	..	0 2 0
Cuttack	Liverpool	..	..	..	2 18 5
	Total	58,378 0 0	1,24,730 0 0	90,799 9 0	1 14 857 22 5

No transactions in sea-imported salt have been reported for the quarter from the ports of Naraingunge, Pooree, and Balasore.

Rainfall, Weather, and State and Prospects of the Crops.

Statement showing Rainfall, Weather, and State and Prospects of the crops in the different districts of Bengal, as reported to Government during the week ending the 25th February 1888.

No.	District and date of return.	Rainfall at Sadler Station in inches.	Character of the weather and state and prospects of the crops
BENGAL.			
<i>Western Districts.</i>			
BURDWAN DIVN.	1 Burdwan, Feb 25, '88	Nil	Weather—cloudless and warm. Prospects of crops fair. Average outturn 10 annas. Rice sold at 21 seers per rupee.
	2 Bankura „ 25, '88	Nil	Weather—seasonable. Cutting and pressing of sugarcane are going on briskly. Mustard, gram and other pulses are being gathered. Wheat and barley are ripening. No change in the rice market.
	3 Deerbhoon „ 24, '88	Nil	Weather—seasonable. Prospects of <i>rubbi</i> crops good. Sugarcane pressing going on.
	4 Midnapur „ 25, '88	Nil	Weather—warm, but seasonable. <i>Rubbi</i> crops good, save in extreme west.
	5 Hooghly „ 25, '88	Nil	Weather—seasonable. Harvesting of <i>rubbi</i> continues with good outturn. Ploughing going on. Mango trees in full blossom.
	Howrah „ 25, '88	Nil	North wind. Weather cool. All prospects good.
<i>Central Districts.</i>			
PRESIDENCY DIVN.	6 24-Pergha, Feb 28, '88	Nil	Weather bright; getting warmer daily. Prospects of cold weather crops satisfactory. Ploughing in progress. Pressing of sugarcane continues.
	7 Nuddea „ 25, '88	Nil	Weather—sultry and dry; nights cool. The reports are good for the whole district. Wheat is very fine.
	8 Khoolna „ 25, '88	Nil	Weather—growing warmer, clear with north wind. Cold weather crops doing well.
	9 Jessore „ 25, '88	Nil	Weather—getting warm in the daytime. Ploughing of rice lands now going on. Prospects of winter crops satisfactory.
	10 Moorshedabad „ 25, '88	Nil	Weather—getting warmer. State of <i>rubbi</i> crops good. They are being cut in some parts.
RAJSHAHY DIVN.	11 Dinagepur Feb 25, '88	Nil	Weather—seasonable. The harvesting of winter rice finished. Outturn estimated to be 12 annas. Prospects of <i>rubbi</i> and other crops good. Rice 20 to 25 seers per rupee.
	12 Rajshahye „ 25, '88	Nil	Weather—getting warm. Condition of spring crops generally good. <i>Ganya</i> manufacture continues. Ploughing for early rice and planting of sugarcane have commenced.
	13 Rungpur „ 25, '88	Nil	Weather—hot days and cold nights. Prospects of <i>rubbi</i> crops good.
	14 Bogra „ 25, '88	Nil	Weather—seasonable. State and prospects of crops continue satisfactory.
	15 Pubna „ 25, '88	Nil	Weather—nights still cool, days becoming warm. Growing crops good. Ploughing general.
	16 Darjeeling „ 25, '88	Nil	Weather—seasonable. State and prospects of crops good.
	17 Julpigoree „ 25, '88	Nil	Weather—getting warm. Gathering of mustard in progress. Prospects of tobacco and <i>rubbi</i> good. Lands are being ploughed for early rice.
<i>Eastern Districts.</i>			
DACCA DIVISION.	18 Dacca, Feb 25, '88	Nil	Weather—days getting hot; mornings and nights cool. Ploughing for early rice continues. <i>Rubbi</i> crops doing well. Prospects good. Condition of agricultural stock good.
	19 Furreedpur „ 25, '88	Nil	Weather—getting warm in the day. Crops on the ground doing well. <i>Rubbi</i> harvesting begun in some places.
	20 Backergunge „ 21, '88	Nil	Weather—seasonable. Prospects of crops continue good.
	21 Mymensingh „ 21, '88	Nil	Weather—seasonable. State and prospects of crops good.
	22 Chittagong Feb 28, '83	Nil	Weather—seasonable. Prospects of standing crops fair. Prices stationary.
CHITTAGONG DIVN.	23 Noakhally „ 24, '88	Nil	Weather—variable—sometimes warm and sometimes cold. Mornings occasionally foggy. <i>Rubbi</i> crops are in progress in the field. Soil for <i>aus</i> crops is being ploughed and prepared.
	24 Tipperah „ 23, '88	Nil	Weather—getting warm. State and prospects of crops very satisfactory.
	Brahmanbariah „ „	0.39	
	25 Chittagong Hill Tracts „ 21, '88	0.20	Weather—cloudy during the first part of the week. Tobacco and other crops progressing. <i>Jum</i> cutting continues.
	Hill Tipperah „ 22, '88	0.45	Weather—getting warm. Tobacco and sugarcane are being cut. <i>Bore paddy</i> is being transplanted. <i>AV</i> (oilseeds) is being sown.

No	District and date of return	Rainfall at Sudder Station in inches	Character of the weather and state and prospects of the crops
BEHAR			
PATNA DIVN.	26 Patna Feb 25, '88	Nil	Weather days getting warmer, nights still cool. Prospects for rice continue favourable. Mustard is being gathered in place. Paddy promises well, opium is being extracted in places. Prices stationary.
	27 Gaya „ 25, '88	Nil	Weather reasonable. <i>Rabbi</i> progressing tolerably well and is nearly ready. Opium being extracted.
	28 Shahabad „ 25, '88	Nil	Weather—being tolerably clear, a little hot in the day. Harvesting for rice crops is in progress and the prospects are hopeful. It is said some is being planted. Weather continues favourable for paddy the draught is being collected and the outturn is reported to be abundant.
	29 Durbhanga „ 25, '88	Nil	Weather reasonable. Prospects of <i>rabbi</i> continue favourable. Mustard and tobacco are being gathered. Extraction of opium has commenced in places. Prices remain stationary.
	30 Mozufferpur „ 25, '88	Nil	Weather mostly clear and getting warm. Prospects for rice crops favourable. Paddy doing well, collection of draught has commenced.
	31 Saran „ 25, '88	Nil	Weather—getting hot, westerly winds strong in the week. Prospects for <i>rabbi</i> continue good. Harvesting of peas commenced. Cultivation for rice is being collected.
	32 Chumparan „ 25, '88	Nil	Weather fair with west wind. <i>Rabbi</i> crop doing well. Opium being collected. Prospects fair. Indigo sowings commenced.
BRAGULORE DIVN.	33 Monghyr Feb 25, '88	Nil	Weather reasonable, west wind prevailing. <i>Rabbi</i> is progressing fairly and the prospects continue good. Indigo sowings have commenced in the Bagaulore sub-division.
	34 Bhagalpur „ 25, '88	Nil	Weather—getting warm during the day, west wind prevailing. Prospects for <i>rabbi</i> crops fair. In 10 anna harvest only expected.
	35 Purnea „ 25, '88	Nil	Weather—warmer. <i>Rabbi</i> crops doing fairly well. Mustard and wheat harvest is in progress.
	36 Malda „ 25, '88	Nil	Weather—reasonable. <i>Rabbi</i> doing well except in outmost districts where the crop has suffered to some extent for want of rain. Indigo harvest is in progress. <i>Boro</i> paddy continues. Commence sowing at an average of 23 to 24 per rupee.
	37 Southal Pargana „ 25, '88	Nil	Weather—temperature rising with strong westerly winds. Weather improving well. Outturn at Rajahal estimated at 10 to 12 annas. Sugarcane in Godda now planted out. Mango trees are in blossom.
ORISSA			
ORISSA DIVN.	38 Cuttack Feb 24, '88	0.02	Weather—fair and seasonable. <i>Dalua</i> rice is being transplanted. Ploughing has commenced. Common rice sells at 21 annas per rupee and wheat at 11 annas. In some places in the interior.
	39 Poores „ 23, '88	1.46	Weather—seasonable. Land is being ploughed. <i>Dalua</i> crop thriving. Prospects for mango good. Common rice sells at 26 annas 5 chittas per rupee in the Sudder sub-division and 24 annas 1 chittas in the Khondal sub-division.
	40 Balasore „ 24, '88	Nil	Weather getting warmer. Land is being tilled for rice cultivation. Favourable on the ground.
CHOTA NAGPORE			
<i>South West Frontier Agency</i>			
CHOTA NAGPORE DIVN.	41 Harnadigha Feb 24, '88	Nil	Weather—cloudy till 22nd, clear since. Prospects of <i>rabbi</i> in place. Wheat, barley, and grain approaching maturity. The rice is still expected to be 8 annas. Mango and <i>mohua</i> coming in places. Paddy being harvested and the draught collected. Cattle diseases continue to prevail in places.
	42 Lohardigha „ 25, '88	Nil	Weather—seasonable and clear. <i>Rabbi</i> doing well. Rice steady.
	43 Singbhoon „ 24, '88	Nil	Weather—sunny, getting warm. Cattle doing well. The oilseeds and grain are also reported well. Cattle disease exists in thana Bahadur.
	44 Manbhoon „ 24, '88	Nil	Weather—getting warmer. Sugarcane pressing in progress. Cattle diseases. Prospects of all spring crops good.

Published for general information.

CALCUTTA, REVENUE DEPT.;
The 28th February 1888.

P. NOJAN
Secy to the Govt of B. & G.

Meteorological Report of the Province of Bengal

METEOROLOGICAL DIVISION.			STATION OBSERVATIONS.												
DISTRICT.	Representative station.	AIR PRESSURE.			WIND.		TEMPERATURE.								
		Mean barometric height, 10 a.m.	Mean reduced to sea-level.	Variation from mean.	Prevailing direction.	Mean wind velocity.	Highest during week.	Date.	Lowest during week.	Date.	Mean maximum temperature.	Mean minimum temperature of week.	Mean daily temperature of week.	Variation from normal of week.	
OCEANIC.	Gopulpore	29.991	30.011	-0.016	Calm	158	89.7	24th Feb.	79.3	20th, 21st Feb.	81.1	72.3	77.8	+2.8	
	Pooree	30.027	30.040	-0.016	Variable	213.0	87.4	23rd "	61.6	10th "	81.4	67.3	74.9	+0.4	
	Cuttack	29.961	30.044	-0.088	SEW	27.0	97.4	23rd "	61.4	22nd "	92.4	67.3	80.1	+1.6	
	Balasore	29.979	30.039	-0.019	NNE	88.1	91.4	23rd "	54.6	19th, 20th Feb.	80.1	64.1	75.1	+3.2	
	South-West Midnapore	Saugor Island	30.031	30.058	-0.006	WSW, NE	219.0	85.7	23rd "	57.9	19th "	81.8	67.3	74.5	0
SOUTH-WEST BENGAL.	South 24 Pergunnahs	Midnapore	29.919	30.074	+0.013	N	63.8	91.3	22nd "	55.7	19th "	87.0	60.9	74.0	+1.9
	Howrah	Calcutta	30.019	30.041	-0.018	SW	79.0	87.0	22nd, 23rd Feb.	50.3	10th "	83.0	60.9	71.7	-1.9
	Hooghly	Burdwan	29.946	30.049	-0.011	NW	48.7	90.6	13rd "	52.3	11th "	80.1	78.2	72.2	0
	Bankura	Bankura	29.720	—	—	NW	41.0	87.1	13rd "	56.9	11th "	82.7	61.3	72.0	—
	Beerbhoom	Ranagunge	29.713	30.040	0	SW, NW	88.1	90.5	22nd "	57.3	13th "	80.5	59.1	72.8	+2.5
	West Burdwan	Herhampore	29.940	30.040	+0.005	W	44.5	88.6	23rd "	52.7	0th "	81.3	58.2	70.3	-1.2
	Moorshedabad	Krishnaghat	29.954	30.021	—	WNW	68.3	83.6	13rd "	49.0	13th "	81.3	61.1	69.7	—
	Nulda	Jessore	30.012	30.040	-0.001	Calm	49.0	50.2	22nd "	52.0	20th "	85.8	56.4	71.1	-1.9
	Khoulna	Chittagong	29.952	30.044	-0.006	Calm & Westerly	62.0	84.6	24th "	56.6	1st "	81.2	61.3	71.2	0
	Chittagong Hill Tracts	Demakiri	30.025	30.038	+0.019	Calm	58.6	80.3	23rd "	55.6	19th, 20th Feb.	82.7	61.5	72.1	+1.8
SOUTH BENGAL.	Backergunge	Barisal	29.902	30.043	-0.041	Calm	91.1	84.0	21rd "	52.2	20th "	81.0	59.6	70.8	+2.2
	Noakhally	Furreedpore	30.008	30.040	+0.013	Westerly	53.0	86.3	21rd "	50.8	0th "	82.0	54.6	69.3	-0.1
	Dacca	Dacca	30.014	30.037	+0.003	SSW	53.0	87.6	13rd "	54.1	19th "	83.0	57.9	70.5	-1.5
	Comilla	Comilla	30.007	30.044	+0.011	S	54.6	87.9	23rd "	52.1	20th "	82.8	58.2	70.5	+1.6
	Mymensingh	Mymensingh	29.978	30.038	+0.001	NE	63.9	86.6	23rd "	49.0	20th "	80.9	53.7	67.3	+0.4
	Bogra	Bogra	29.940	30.005	—	NW	68.7	84.8	21th "	47.6	19th "	81.2	51.5	66.4	—
	Pubna	Srajgunge	29.975	30.023	-0.007	WSW	46.3	88.0	23rd "	47.4	19th "	83.2	52.2	67.2	+0.6
	Rajshahy	Rampore Beach	29.961	30.033	+0.023	SW	60.4	85.2	22nd & 23rd Feb.	46.7	20th "	81.6	51.3	66.0	+0.5
	Maldah	Maldah	29.947	—	—	NW	76.2	85.4	24th "	45.1	21st "	81.1	50.3	65.7	—
	Dinapore	Dinapore	29.896	30.020	+0.016	North-westerly with westerly	92.0	80.1	23rd "	40.3	19th "	81.8	50.9	66.3	+0.3
NORTH BENGAL.	Rungpore	Rungpore	29.854	30.021	-0.053	Westerly	72.0	83.8	22nd "	48.0	10th "	80.0	50.7	65.4	+0.5
	Jalpigore	Jalpigore	30.743	30.042	-0.029	E	23.2	81.4	23rd "	46.0	18th "	77.4	51.1	64.3	-0.1
	Cooch Behar	Darjeeling	22.990	—	-0.004	Calm	52.6	53.4	23rd "	29.5	18th "	46.7	35.7	41.2	-0.1
	Darjeeling Hill Tracts	Purneah	29.917	30.048	+0.002	Calm	80.3	86.2	23rd "	43.0	19th "	80.5	51.7	66.1	-1.1
	Purneah	Moruffepore	29.875	30.051	+0.001	Westerly	137.0	81.9	23rd "	51.9	19th "	76.5	55.8	66.1	+0.2
	Durbhunga	Motihari	29.781	30.015	-0.006	W	209.1	84.7	23rd "	41.8	18th "	80.3	48.7	64.5	+1.0
	Chumbarun	Chupra	29.839	30.042	-0.007	W	167.0	85.0	22nd "	50.0	19th & 20th Feb.	80.4	51.0	67.2	+1.1
	Saran	Dehree	29.803	30.058	+0.008	WSW	204.0	81.5	24th "	53.0	19th "	75.0	60.5	67.8	+1.0
	Shahabad	Buxar	29.811	30.061	-0.003	WNW	145.1	85.4	21st "	47.0	19th "	81.5	54.5	68.0	+1.2
	Arrah	Gya	29.846	30.036	-0.024	W	95.5	86.9	22nd "	51.4	18th "	83.7	57.3	70.5	+0.1
SOUTH BENGAL.	Patna	Bankipore	29.856	30.047	-0.020	NW	90.5	84.4	22nd "	44.0	19th "	81.2	54.2	67.7	+0.7
	South Bhagulpore	Bhagulpore	29.879	30.046	+0.014	W	92.0	85.4	23rd "	48.0	19th "	81.0	54.3	67.6	+1.3
	Monghyr	Doomka	29.881	—	-0.039	WNW, NW	104.4	88.6	22nd "	50.6	19th "	84.8	50.3	70.6	+1.4
	South 24 Pergunnahs	Hazaribagh	28.916	30.058	+0.033	WNW	213.1	83.9	21st "	42.3	18th, 19th Feb.	79.6	56.2	68.1	+0.9
	Lohardugga	Ranchee	27.578	30.038	+0.007	NW	157.0	86.9	22nd "	50.7	19th "	80.5	57.9	69.2	+1.5
SOUTH BENGAL.	Manbhoom	Chynabasa	29.259	—	+0.003	Westerly	80.2	90.5	23rd "	54.2	19th "	80.5	50.1	65.3	+1.6
	Singbhoom	Chynabasa	29.259	—	+0.003	Westerly	80.2	90.5	23rd "	54.2	19th "	80.5	50.1	65.3	+1.6

Remarks.—Barometer.—The normal means of air pressure and temperature are the arithmetical average or mean of the readings of the barometer and thermometer respectively, taken at the same time and place, and are given in this table in the district columns. The humidity of the atmosphere is expressed as percentage, saturated air being represented by 100. The numerical means of the wind are given in the district columns, and are determined from the number of stations in the district sending returns, and are given in the district columns.

for the week ending Friday, the 24th of February 1888

DISTRICT OBSERVATIONS														Representative station	DISTRICT	METEOROLOGICAL DIVISION																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																						
Average humidity at 10 A.M.	Average ground amount at 10 A.M. for week.	Rainfall of week at other stations.	OF WEEK		RAINFALL																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																	
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The variations are positive when the mean for the week is less than the corresponding normal mean, and positive when greater than the normal mean. The variations are negative when the mean for the week is greater than the corresponding normal mean, and positive when greater than the normal mean. Under the head District observations of rainfall the normal mean is the mean of the district, and the variations are the variations of the district from the normal mean.

Statement of Rainfall in Bengal for the week ending Friday (6 p.m.), the 24th of February 1888

Meteorological division	District	Station	RAINFALL					TOTAL		Total rain fall since 1st 1 month	Average total rain fall from 1st 1 month	Total rain fall since 17th May 1887	Average rain fall from 1 May date	
			Saturday 18th February	Sunday 19th February	Monday 20th February	Tuesday 21st February	Wednesday 22nd February	Thursday 23rd February	Friday 24th February					No. of days	Re. fall week
ORISSA	Puri	Poori							Nil	Nil	1.81	0.78	30.43	
		Khandh							Nil	Nil	0.00	0.00	0.00	
		Bangur							Nil	Nil	0.00	0.00	0.00	
		Chas. 1 mi							Nil	Nil	1.41	0.58	71.01	
		G. 2							Nil	Nil	0.41	0.16	51.22	
	Cuttack	Tarikhnapur							Nil	Nil	1.00	0.78	31.08	
		Baid							Nil	Nil	0.00	0.00	0.00	
		Cuttack							Nil	Nil	0.00	0.00	0.00	
		K. h. pura							Nil	Nil	0.00	0.00	0.00	
		Chas. 1 mi							Nil	Nil	0.00	0.00	0.00	
	Balasore	Chas. 1 mi							Nil	Nil	0.00	0.00	0.00	
		Chas. 1 mi							Nil	Nil	0.00	0.00	0.00	
		Chas. 1 mi							Nil	Nil	0.00	0.00	0.00	
		Chas. 1 mi							Nil	Nil	0.00	0.00	0.00	
		Chas. 1 mi							Nil	Nil	0.00	0.00	0.00	
NORTH WEST BENGAL	Midnapore	Chas. 1 mi							Nil	Nil	0.00	0.00	0.00	
		Chas. 1 mi							Nil	Nil	0.00	0.00	0.00	
		Chas. 1 mi							Nil	Nil	0.00	0.00	0.00	
		Chas. 1 mi							Nil	Nil	0.00	0.00	0.00	
		Chas. 1 mi							Nil	Nil	0.00	0.00	0.00	
	24 Parganas	Chas. 1 mi							Nil	Nil	0.00	0.00	0.00	
		Chas. 1 mi							Nil	Nil	0.00	0.00	0.00	
		Chas. 1 mi							Nil	Nil	0.00	0.00	0.00	
		Chas. 1 mi							Nil	Nil	0.00	0.00	0.00	
		Chas. 1 mi							Nil	Nil	0.00	0.00	0.00	
	Howrah	Chas. 1 mi							Nil	Nil	0.00	0.00	0.00	
		Chas. 1 mi							Nil	Nil	0.00	0.00	0.00	
		Chas. 1 mi							Nil	Nil	0.00	0.00	0.00	
		Chas. 1 mi							Nil	Nil	0.00	0.00	0.00	
		Chas. 1 mi							Nil	Nil	0.00	0.00	0.00	
Hooghly	Chas. 1 mi							Nil	Nil	0.00	0.00	0.00		
	Chas. 1 mi							Nil	Nil	0.00	0.00	0.00		
	Chas. 1 mi							Nil	Nil	0.00	0.00	0.00		
	Chas. 1 mi							Nil	Nil	0.00	0.00	0.00		
	Chas. 1 mi							Nil	Nil	0.00	0.00	0.00		
Burdwan	Chas. 1 mi							Nil	Nil	0.00	0.00	0.00		
	Chas. 1 mi							Nil	Nil	0.00	0.00	0.00		
	Chas. 1 mi							Nil	Nil	0.00	0.00	0.00		
	Chas. 1 mi							Nil	Nil	0.00	0.00	0.00		
	Chas. 1 mi							Nil	Nil	0.00	0.00	0.00		
Barkura	Chas. 1 mi							Nil	Nil	0.00	0.00	0.00		
	Chas. 1 mi							Nil	Nil	0.00	0.00	0.00		
	Chas. 1 mi							Nil	Nil	0.00	0.00	0.00		
	Chas. 1 mi							Nil	Nil	0.00	0.00	0.00		
	Chas. 1 mi							Nil	Nil	0.00	0.00	0.00		
Berhampore	Chas. 1 mi							Nil	Nil	0.00	0.00	0.00		
	Chas. 1 mi							Nil	Nil	0.00	0.00	0.00		
	Chas. 1 mi							Nil	Nil	0.00	0.00	0.00		
	Chas. 1 mi							Nil	Nil	0.00	0.00	0.00		
	Chas. 1 mi							Nil	Nil	0.00	0.00	0.00		
Nuddea	Chas. 1 mi							Nil	Nil	0.00	0.00	0.00		
	Chas. 1 mi							Nil	Nil	0.00	0.00	0.00		
	Chas. 1 mi							Nil	Nil	0.00	0.00	0.00		
	Chas. 1 mi							Nil	Nil	0.00	0.00	0.00		
	Chas. 1 mi							Nil	Nil	0.00	0.00	0.00		
Kishore	Chas. 1 mi							Nil	Nil	0.00	0.00	0.00		
	Chas. 1 mi							Nil	Nil	0.00	0.00	0.00		
	Chas. 1 mi							Nil	Nil	0.00	0.00	0.00		
	Chas. 1 mi							Nil	Nil	0.00	0.00	0.00		
	Chas. 1 mi							Nil	Nil	0.00	0.00	0.00		
Jessore	Chas. 1 mi							Nil	Nil	0.00	0.00	0.00		
	Chas. 1 mi							Nil	Nil	0.00	0.00	0.00		
	Chas. 1 mi							Nil	Nil	0.00	0.00	0.00		
	Chas. 1 mi							Nil	Nil	0.00	0.00	0.00		
	Chas. 1 mi							Nil	Nil	0.00	0.00	0.00		
Meersha	Chas. 1 mi							Nil	Nil	0.00	0.00	0.00		
	Chas. 1 mi							Nil	Nil	0.00	0.00	0.00		
	Chas. 1 mi							Nil	Nil	0.00	0.00	0.00		
	Chas. 1 mi							Nil	Nil	0.00	0.00	0.00		
	Chas. 1 mi							Nil	Nil	0.00	0.00	0.00		
East Buxar	Chas. 1 mi							Nil	Nil	0.00	0.00	0.00		
	Chas. 1 mi							Nil	Nil	0.00	0.00	0.00		
	Chas. 1 mi							Nil	Nil	0.00	0.00	0.00		
	Chas. 1 mi							Nil	Nil	0.00	0.00	0.00		
	Chas. 1 mi							Nil	Nil	0.00	0.00	0.00		

Statement of Rainfall in Bengal for the week ending Friday (6 p.m.), the 24th of February 1888 - contd

Meteorological Division	District.	Station	RAINFALL							TOTAL		Total rain fall since 1st May 1887	Average rainfall from 1st May 1887 to date
			Tuesday 24th February	Wednesday 25th February	Thursday 26th February	Friday 27th February	Saturday 28th February	Sunday 29th February	Monday 1st March	Number of days	of rain		
EAST BENGAL -continued	Noakhally	Gournadi								Nil	Nil	0.1	?
		Banphal								Nil	Nil	0.1	?
		Noakhally								Nil	Nil	0.1	110.48
		Kemur								Nil	Nil	0.14	110.86
	Barisal	Hatishpore	0.40							Nil	Nil	0.5	?
		Damangaj								Nil	Nil	0.5	?
		Madaripore								Nil	Nil	0.5	57.07
		Lurrupore								Nil	Nil	1.7	58.42
	Dacca	Goalundo								Nil	Nil	1.1	58.34
		Munshiganj								Nil	Nil	1.1	73.27
		Dacca								Nil	Nil	1.1	61.01
		Naimaniganj								Nil	Nil	1.1	63.04
	Hill Tipperah	Munshiganj								Nil	Nil	0.88	54.41
		Jydehpore								Nil	Nil	0.8	?
		Azimutla								Nil	Nil	1.1	61.71
		Comilla								Nil	Nil	1.1	78.55
	Mymensingh	Chandpore								Nil	Nil	1.1	82.34
		Brahmanbari								Nil	Nil	1.1	64.41
		Kamchandani								Nil	Nil	1.44	?
		Nasir nagar								Nil	Nil	1.43	?
	Mymensingh	Daudkandi								Nil	Nil	1.07	?
		Kishoreganj								Nil	Nil	1.15	?
		Atia (Tingari)								Nil	Nil	0.7	71.21
		Mymensingh								Nil	Nil	1.8	57.40
	Pubna	Jamali								Nil	Nil	1.1	75.20
		Netrokona								Nil	Nil	1.1	65.41
		Netrokonikhali								Nil	Nil	0.4	72.97
		Durgapara								Nil	Nil	0.8	?
	Hojla	Deuaganj								Nil	Nil	1.1	?
		Pubna								Nil	Nil	1.1	55.43
		Seirajganj								Nil	Nil	1.8	55.01
		Shetpore								Nil	Nil	0.4	61.02
	Rajshahi	Nowkhilla								Nil	Nil	0.4	55.14
		Bokra								Nil	Nil	0.4	61.14
		Lanchhali								Nil	Nil	0.4	55.24
		Beaulah								Nil	Nil	0.8	5.09
	Maldah	Nattore								Nil	Nil	1.8	56.5
		Narayan								Nil	Nil	1.1	?
		Lalpur								Nil	Nil	1.1	?
		Handa								Nil	Nil	0.10	?
	Dinagore	Maldah								Nil	Nil	0.13	52.31
		Chanchal								Nil	Nil	0.1	54.0
		Gajol								Nil	Nil	0.1	?
		Sitaganj								Nil	Nil	0.1	?
	Jalpaiguri	Mohadehpore								Nil	Nil	0.8	58.45
		Churamon								Nil	Nil	0.1	5.00
		Raigunge								Nil	Nil	0.1	5.41
		Dumkapore								Nil	Nil	1.1	62.3
	Jalpaiguri	Balotghat								Nil	Nil	0.1	51.09
		Bhawaniganj								Nil	Nil	0.1	67
		(Gyabanda)								Nil	Nil	0.09	71.74
		Knapore								Nil	Nil	0.1	54.2
	Jalpaiguri	Knapore								Nil	Nil	0.18	5.81
		Knapore								Nil	Nil	0.18	?
		Knapore								Nil	Nil	0.18	?
		Knapore								Nil	Nil	0.18	?
	Jalpaiguri	Ulipore								Nil	Nil	0.1	116.63
		Jalpaiguri								Nil	Nil	0.1	?
		Atpara								Nil	Nil	0.1	?
		Fillaofa								Nil	Nil	0.1	?
	Cooch Behar	Debiganj								Nil	Nil	0.1	?
		Dinhatta								Nil	Nil	0.1	55.0
		Cooch Behar								Nil	Nil	0.1	115.64
		Mitkhigunja								Nil	Nil	0.1	100.7
	Darjeeling Hill	Katabhanga								Nil	Nil	0.1	11.5
		Buxa								Nil	Nil	0.1	491.03
		Siliguri								Nil	Nil	0.1	102.50
		Darjeeling								Nil	Nil	0.1	11.71
	Purneah	Katimpour								Nil	Nil	0.1	81.77
		Kissengunge								Nil	Nil	0.1	61.02
		Arrah								Nil	Nil	0.1	61.05
		Purneah								Nil	Nil	0.1	61.05
	North Bengal-pore	Gondwara								Nil	Nil	0.1	?
		Balarampore								Nil	Nil	0.1	?
		Mattari								Nil	Nil	0.1	?
		Kaliaganj								Nil	Nil	0.1	?
	Darbhanga	Madadpore								Nil	Nil	0.1	40.85
		Sopool								Nil	Nil	0.1	45.00
		Protaganj								Nil	Nil	0.1	?
		Tajpore								Nil	Nil	0.1	43.73
	Mossfertpore	Darbhanga								Nil	Nil	0.1	4.02
		Madhubani								Nil	Nil	0.1	45.02
		Bahera								Nil	Nil	0.1	?
		Koshera								Nil	Nil	0.1	?
	Chaugachan	Sitamathi								Nil	Nil	0.1	42.1
		Mossfertpore								Nil	Nil	0.1	40.11
		Hajipore								Nil	Nil	0.1	42.78
		Pura								Nil	Nil	0.1	?
	Chaugachan	Mahua								Nil	Nil	0.1	?
		Sinkor								Nil	Nil	0.1	?
		Pupri								Nil	Nil	0.1	?
		Kotibari								Nil	Nil	0.1	41.0
	Chaugachan	Bettiah								Nil	Nil	0.1	40.11
		Bettiah								Nil	Nil	0.1	?
		Bettiah								Nil	Nil	0.1	?
		Bettiah								Nil	Nil	0.1	?

Statement of Rainfall in Bengal for the week ending Friday (6 p m), the 24th of February 1888.—*concl'd*

Meteorological Division	District	Station	RAINFALL							TOTAL		Total rain fall since 1st of month	Average total rain fall from 1st of month	Total rain fall since 18th Ma 1887	Avg rain fall from 1st May to date
			Sunday 18th February	Monday 19th February	Tuesday 20th February	Wednesday 21st February	Thursday 22nd February	Friday 23rd February	Saturday 24th February	Number of rainy days	of Rainfall week				
NORTH BHAR -continued	Nagpur	Gopalgunge							Nil	Nil	Nil	0.11	42.58	44.7	
		S. wat							Nil	Nil	Nil	0.41	39.74	41.1	
SOUTH BHAR	Akshatad	Buxar							Nil	Nil	Nil	0.02	38.47	41.1	
		Danore							Nil	Nil	Nil	0.08	34.71	3	
		Bhubani							Nil	Nil	Nil	0	41.88	41.1	
		Sawa rain							Nil	Nil	Nil	0.48	36.14	41.1	
		Arwa							Nil	Nil	Nil	0.40	41.14	41.1	
		Mohania							Nil	Nil	Nil	0	41.14	41.1	
	Gya	Aurungabad							Nil	Nil	Nil	0.37	21.96	41.1	
		Sa							Nil	Nil	Nil	0.11	41.70	4	
		Nowadsh							Nil	Nil	0.02	0.1	39.54	4.7	
		Chandkhil							Nil	Nil	Nil	0.42	4.77	41.01	
		Arwal							Nil	Nil	0.01	0.1	1.13		
		Daudnagar							Nil	Nil	Nil	0	34.61		
		Sherrghati							Nil	Nil	Nil	0	36.45		
		Rajweli							Nil	Nil	Nil	0			
		Lakra Sarawan							Nil	Nil	Nil	0	22.24	0	
	Patna	Patna							Nil	Nil	Nil	0.08	37.17	4	
		Dhansupur							Nil	Nil	Nil	0.11	38.14	41.1	
		Bihar							Nil	Nil	Nil	0	37.14	4	
		Butt							Nil	Nil	Nil	0.11	39.04	3.81	
		Butt							Nil	Nil	Nil	0	40.1		
	Munehyr	Butt							Nil	Nil	Nil	0	34.64		
		Butt							Nil	Nil	Nil	0			
	South Hnagul-jore	Begowara							Nil	Nil	Nil	0.7	49.18	40.1	
		Mohani							Nil	Nil	0.07	0.01	47.21	4.01	
		Jamu							Nil	Nil	0.09	0.01	40.12	40.1	
		Gopri							Nil	Nil	Nil	0	4.13		
	South Hnagul-jore	Sheekpura							Nil	Nil	Nil	0	28.58		
		Bhaguli							Nil	Nil	Nil	0.51	41.13	4.01	
		Bhaguli							Nil	Nil	0.07	0.40	13.06	41.01	
		A. limg							Nil	Nil	Nil	0	43.45		
	Nuthal Per guish	Ramona							Nil	Nil	0.07	0.28	57.18	57.18	
		Godab							Nil	Nil	0.10	0.0	41.5	4.01	
		Lakut							Nil	Nil	0.1	0.1	78.1	23.1	
		Nyadga							Nil	Nil	0.40	0.75	42.71	71.1	
		Dokkur							Nil	Nil	0.1	0.1	47.36	5.1	
		Dokkur							Nil	Nil	0	0.1	40.05	5.1	
		Simra							Nil	Nil	0.07	0	36.71		
		N. hat							Nil	Nil	0.07	0	36.71		
CHUTIA NAO FOR.	Hazaribagh	Lachumia							Nil	Nil	0.19	0.02	42.00	48.07	
		(G. l. l.)							Nil	Nil	0.44	0.71	4.51	48.07	
		Hazaribagh							Nil	Nil	0.45	0.11	41.13	48.07	
		S. m. k. m.							Nil	Nil	0.15	0.15	48.07	48.07	
		S. m. k. m.							Nil	Nil	0.10	0.15	58.10	63.01	
		S. m. k. m.							Nil	Nil	0.11	0	3.74		
		S. m. k. m.							Nil	Nil	0.11	0	49.0		
		S. m. k. m.							Nil	Nil	0.11	0	7.40		
	Tahadugra	L. m. k. m.							Nil	Nil	0.80	0	51.14		
		L. m. k. m.							Nil	Nil	0.80	0	57.16		
		L. m. k. m.							Nil	Nil	0.75	1.08	58.18	7.08	
		L. m. k. m.							Nil	Nil	0.63	0.47	51.71	41.01	
	Munehyr	B. m. k. m.						Nil	Nil	1.20	0	0	0		
B. m. k. m.								Nil	Nil	1.20	0	0	0		
B. m. k. m.								Nil	Nil	1.20	0	0	0		
B. m. k. m.								Nil	Nil	1.20	0	0	0		
	Munehyr	L. m. k. m.						Nil	Nil	1.19	0.02	46.53	46.53		
L. m. k. m.								Nil	Nil	1.19	0.02	46.53	46.53		
L. m. k. m.								Nil	Nil	1.19	0.02	46.53	46.53		
L. m. k. m.								Nil	Nil	1.19	0.02	46.53	46.53		
	Munehyr	L. m. k. m.						Nil	Nil	1.18	0	43.31			
L. m. k. m.								Nil	Nil	1.18	0	43.31			
L. m. k. m.								Nil	Nil	1.18	0	43.31			
L. m. k. m.								Nil	Nil	1.18	0	43.31			

SUMMARY OF THE RAINFALL AND METEOROLOGICAL OBSERVATIONS TAKEN IN BENGAL FOR THE WEEK ENDING FRIDAY, THE 24TH OF FEBRUARY 1888.

THE meteorological conditions which obtained over Bengal at the close of the previous week were those which mark the transition from the cold weather period to the commencement of the hot season. These conditions have also held good throughout the present week. The winds blowing at the southern stations have been very variable in direction, southerly winds prevailing on some days and on others being driven back by a northerly or north-westerly current. Westerly winds have prevailed generally at the inland stations, and in Behar these winds have decidedly increased in force. The variations in temperature have been considerable, there being great difference between the temperatures of the day and night, and on the whole there has been a steady rise of temperature during the week, and the mean temperatures of the last days were decidedly higher than those at the commencement of the week. The changes of humidity have also been remarkable, and from the 18th to the 19th in particular a very rapid decrease in humidity took place, the decrease at Saugor Island equalling no less than 53 per cent., while at Calcutta the decrease was 45 per cent. On the whole, the humidity for the week has been moderately low. For the greater part of the week the movements of the barometer have been small, though pressure has steadily risen for about five days, but on the 19th and 24th pressure increased somewhat rapidly. Over the greater part of the province therefore the meteorological conditions for the week call for no remark, beyond that fine clear weather, with increasing temperature, rather low humidity, and no rain, has generally prevailed; but, on the other hand, for the first day or two in the week conditions were slightly unsettled in East Bengal, and light rain was received, particularly in the Chittagong district.

Pressure.—The mean pressure recorded in the province for the week, taking into consideration only those stations from which observations have been received for a series of years, and which therefore yield reliable averages, has been slightly above the normal at about one-third of the stations and slightly below it at the remainder. For the whole province pressure has been in defect by 0.005 inch.

Temperature.—The mean temperature of the whole province for the week has been in excess of the normal by one degree, but the excess has been largest in Orissa, Chutia Nagpur, and South Behar. The distribution of temperature and its variation from the normal are best seen from the figures given in the following table, where the average maximum, minimum, and mean temperatures at nine typical stations in different districts of the province are compared with the normal values for the period.

Table showing the excess or defect of the actual mean temperature from the normal for the week ending the 24th February 1888.

	Normal mean maxi- mum tem- perature for the week ending 24th February.	Actual mean maxi- mum tem- perature for the week ending 24th February 1888.	Variation of actual mean from the nor- mal.	Normal mean mini- mum tem- perature for the week ending 24th February.	Actual mean mini- mum tem- perature for the week ending 24th February 1888.	Variation of actual mean from the nor- mal.	Normal mean daily tempera- ture for the week ending 24th February.	Actual mean daily tempera- ture for the week ending 24th February 1888.	Variation of actual mean from the nor- mal.
Cuttack	91.1	92.8	+1.7	65.9	67.3	+1.4	78.5	80.1	+1.6
Calcutta	83.5	83.0	-0.5	61.7	60.3	-1.4	72.6	71.7	-0.9
Dacca	84.5	83.0	-1.5	59.4	57.9	-1.5	72.0	70.5	-1.5
Burdwan	85.2	86.1	+0.9	59.2	58.2	-1.0	72.2	72.2	0
Patna	80.8	81.2	+0.4	53.1	54.2	+1.1	67.0	67.7	+0.7
Gya	83.4	83.7	+0.3	57.3	57.2	-0.1	70.4	70.5	+0.1
Purneah	81.6	80.5	-1.1	52.7	51.7	-1.0	67.2	66.1	-1.1
Hazaribagh	79.8	79.6	-0.2	55.4	56.5	+1.1	67.6	68.1	+0.5
Darjeeling	47.1	46.7	-0.4	35.5	35.7	+0.2	41.3	41.2	-0.1

Rainfall.—Except for showers in East Bengal on the 18th and 19th, the whole province has been rainless throughout the week. The rainfall in East Bengal has been mainly confined to the Chittagong district, which has received an average fall of 0.51 inch, and to the Chittagong Hill Tracts which has received an average amount of 0.64 inch.

The following table gives the summary of the temperature and rainfall data of each of the seven meteorological divisions of the province for the week ending Friday, the 24th of February 1888:—

METEOROLOGICAL DIVISIONS.	TEMPERATURE								RAINFALL							
	Highest observed during week.	Lowest observed during week.	Averages for week.			Average mean of week above or below normal mean of week.	Of week.			Rainy days.			Since 1st of month.		Since 1st May 1887.	
			Highest of each day.	Lowest of each day.	Of mean for each day.		Average.	Normal average.	Variation.	Average number in week.	Normal average number in week.	Variation.	Average.	Normal average.	Average.	Normal average.
Orissa	97.4	58.0	86.2	67.8	77.0	+2.0	Nil	0.18	-0.18	0.0	0.4	-0.4	1.60	0.78	46.38	55.03
South-West Bengal	91.3	49.0	84.7	51.1	72.0	+0.2	Nil	0.10	-0.10	0.0	0.4	-0.4	1.29	0.91	48.87	58.16
East Bengal	87.9	48.9	80.1	54.1	70.1	+0.6	0.06	0.13	-0.07	0.2	0.4	-0.2	1.16	0.90	57.41	74.50
North Bengal	88.1	45.1	81.0	51.1	66.1	+0.1	Nil	0.06	-0.06	0.0	0.2	-0.2	0.42	0.68	74.25	70.63
North Bihar	88.2	41.8	79.4	52.5	66.0	+0.8	Nil	0.04	-0.04	0.0	0.2	-0.2	0.02	0.45	52.17	43.00
South Bihar	88.6	48.0	81.3	55.7	68.5	+1.0	Nil	0.01	-0.01	0.0	0.2	-0.2	0.08	0.14	42.77	44.53
Cooch Behar	85.0*	47.8*	79.8*	54.8*	68.4*	+1.4*	Nil	0.00	-0.00	0.0	0.3	-0.3	0.73	0.67	46.53	50.11

* Chyebassa not included.

METEOROLOGICAL OFFICE, BENGAL.

The 29th February 1888

A. PEDLER,

Offg. Meteorological Reporter to the Govt. of Bengal.

Results of the Thermometrical Observations taken at the Meteorological Office, Chowringhee, from 19th to 25th February 1888.

Month	TEMPERATURE						HYGROMETRY			Bar
	Date	Mean	Maximum	Minimum	Minimum	Mean wet bulb	Wet bulb	Dew point	Humidity	
1888							Inches		%	Inches.
February	19th	68.5	81.8	25.4	56.4	57.9	33.9	49.2	49	Nil
"	20th	70.8	81.0	27.6	57.1	61.1	17.0	57.6	63	"
"	21st	76.7	81.7	23.3	61.1	72.1	7.38	70.1	71	"
"	22nd	76.4	84.5	23.8	61.7	63.7	6.7	65.9	70	"
"	23rd	74.8	86.9	24.0	62.9	63.5	11.1	55.6	59	"
"	24th	72.0	85.9	27.8	58.1	59.9	35.5	49.5	46	"
"	25th	71.9	87.0	30.1	57.4	60.8	38.0	51.8	50	"

The mean temperature of the seven days

The extreme variation of temperature

The maximum temperature

The mean relative humidity

The total fall of rain from 19th to 25th February 1888

The mean temperature and humidity are obtained by applying to the mean of the 10h, 16h, and minimum readings a correction dependent on the range, and derived from the hourly observations at the Surveyor-General's Office, Chowringhee, in past years.

METEOROLOGICAL OFFICE, INDIA;

The 27th February 1888.

A. PEDLER,

For Offg. Meteorological Reporter to the Govt. of India.

Results of the Meteorological Observations taken at the Alipore Observatory from
19th to 25th February 1888.

Month.	Date.	Maximum in sun.	Number of hours of bright sunshine.	Mean pressure barometer at 32° Fahr.	TEMPERATURE.				HYGROMETRY.				WIND.		Rain.	WEATHER.
					Mean.	Maximum.	Range.	Minimum.	Mean wet bulb.	Vapour tension.	Dew point.	Humidity.	Prevailing direction.	Miles recorded.		
1888.		°		Inches	°	°	°	°	°	Inches	°	%			Inches.	
Feb.	19th	135.8	10.9	29.965	68.0	79.0	24.4	54.6	67.5	0.337	48.1	52	NNE, WNW and SSW.	62	Nil	Clear
"	20th	139.8	11.7	.955	68.8	82.5	27.2	55.3	61.7	.460	56.6	68	SW, WSW and calm.	71	"	Clear, p. p.
"	21st	140.7	10.0	.966	75.0	86.8	20.5	66.3	69.0	.630	65.6	75	SW and WNW ...	112	"	Chiefly cloudy, o. p.
"	22nd	141.1	9.9	.948	75.4	86.9	21.5	65.4	69.0	.627	65.4	74	SW, NNE and calm	35	"	Clear, p. p.
"	23rd	139.9	10.4	.945	73.2	84.7	22.1	62.6	63.4	.453	56.2	59	NNE, NNW and calm.	81	"	Clear, p. p.
"	24th	140.5	10.6	.980	70.8	84.0	25.8	58.2	60.5	.393	52.2	56	NW and calm ...	59	"	Clear, p. p.
"	25th	141.5	10.6	30.015	70.1	86.0	29.5	56.5	58.9	.353	49.4	48	N by W and NNW	64	"	Clear p.

The mean pressure of the seven days ... 29.968
The average pressure of the corresponding period for 24 years, S. G.'s Office ... 29.931

The total number of hours of bright sunshine ... 73.5
The maximum possible number of hours of sunshine ... 80.5

The mean temperature of the seven days ... 71.6
The average temperature of the corresponding period for 24 years, S. G.'s Office ... 75.2
The extreme variation of temperature ... 32.3
The maximum temperature ... 86.9

The highest velocity of the wind in one hour ... 10

The highest pressure of wind on one square foot ... Not measurable.

The mean relative humidity ... 62
The average relative humidity of the corresponding period for 24 years, S. G.'s Office ... 66

The total fall of rain from 19th to 25th February 1888 ... Nil
The average fall of the corresponding period for 24 years, S. G.'s Office ... 0.21
The total fall from 1st January to 25th February 1888 ... 2.52
The average fall of the corresponding period for 24 years, S. G.'s Office ... 1.36

The mean pressure, temperature, &c., are deduced from the traces of the Barograph and Thermograph, and from observations made at 6h, 10h, 16h, and 22h.

The maximum and minimum temperatures are obtained from self-registering thermometers. All the thermometers are verified, and the readings have been corrected to a standard constructed and verified at the Kew Observatory. They are exposed under a thatched shed open at the sides, and are suspended four feet above the ground.

The barometer readings are corrected approximately to those of the standard Newman's No. 86, formerly at the Surveyor-General's Office.

The hygrometric elements are obtained from Tables III, IV, and V of the official tables computed in the Meteorological Office, and based on Regnault's modifications of August's formula.

The directions and the movement of the wind are taken from the trace of a Beckley's anemograph.

The mouth of the rain-gauge is one foot above the ground.

o overcast. d. dew. = fog.

A. PEDLER,

For Offg. Meteorological Reporter to the Govt. of India.

METEOROLOGICAL OFFICE, GOVT. OF INDIA;
Calcutta, the 27th February 1888.

MEMORANDUM.

THE annexed table presents the mortuary statistics of the districts in Bengal (containing a population of 66,163,884) for the month of December 1887. The results to be gathered from it, contrasted with those for the preceding month and for the corresponding month of the past year, are the following:—

1. Deaths registered—

		DURING THE MONTHS OF—		
		Dec 1887.	Nov 1887.	Dec 1886
Number	...	146,349	147,957	187,707
Ratio per mille	...	26.28	26.76	33.96

The above figures indicate, as compared with the corresponding month of the preceding year, a large decrease in the number of deaths recorded.

2. The highest casualty-rates were returned from the following districts:—

Districts	Ratio per mille.	Districts.	Ratio per mille.
Maldah	48.00	Purneah	35.40
Dinajpur	41.40	Khulna	35.04
Rajshahye	41.28	Pubna	34.92
Julpaiguri	41.16	Howrah	34.20
24-Pergunnahs	40.32	Puri	33.00
Rungpore	40.08	Midnapore	31.80
Bogra	39.72	Hughli	31.44
Birbhum	38.62	Jessore	30.84
Backerganj	38.16	Monghyr	30.24
Nuddea	36.00	Darjiling	30.00
Murshidabad	36.00	Bhagulpore	29.28

3. As compared with the results of the corresponding month of the past year, the mortality from cholera and fever declined considerably, the death-rate from injury was stationary, and there were no noticeable differences in fatal results from the other diseases; vide figures given below:—

		Ratio per mille during—	
		December 1887.	December 1886.
Cholera	...	84	4.32
Small-pox	...	03	02
Fever	...	20.52	21.12
Bowel-complaints	...	84	1.08
Injury	...	12	12
Other causes	...	3.72	4.08

4. The undermentioned districts suffered pre-eminently from cholera, fever and the unspecified diseases coming under the head of "Other causes," the other diseases (indicated in the above table) manifesting no noticeable exacerbations:—

Cholera.		Fever.		Other causes	
	Ratio per mille.		Ratio per mille.		Ratio per mille.
24-Pergunnahs	6.84	Maldah	47.28	Puri	17.52
Puri	4.68	Rajshahye	39.96	Backerganj	12.60
Howrah	4.56	Dinajpur	38.40	Tipperah	10.08
Midnapore	4.32	Rungpur	37.92		
Balasore	3.36	Julpaiguri	37.32		
Chittagong	2.28	Bogra	35.40		
Mymensing	2.16	Purneah	34.80		
		Murshidabad	32.76		
		Pubna	32.16		
		Nuddea	31.68		
		Birbhum	30.96		
		Khulna	28.92		
		Jessore	27.48		
		24-Pergunnahs	25.56		
		Monghyr	24.48		
		Bhagulpore	24.48		
		Backerganj	24.24		
		Hughli	23.76		
		Darjiling	23.52		
		Burdwan	22.80		
		Lohardugga	21.96		
		Noakhali	21.60		
		Midnapore	21.24		

5. In relation to Sex, Class and Age, the death-rates during the month under notice stood as follows:—

According to Sex.		According to Class.		According to Age.	
	Ratio per mille.		Ratio per mille.		Ratio per mille.
Males	27.72	Christians	14.28	Under 1 year	177.60
Females	24.84	Hindus	24.12	1 and under 5 years	82.16
Ratio of male deaths to every 100 female deaths	110	Mahomedans	31.44	5 " " 10 "	14.64
		Budhists	17.88	10 " " 15 "	11.68
		Other classes	17.16	15 " " 20 "	18.92
				20 " " 30 "	17.04
				30 " " 40 "	19.92
				40 " " 50 "	24.48
				50 " " 60 "	36.80
				60 years and upwards	51.20

R. LIDDERDALE, M.D., Deputy Surgeon-General.

Sanitary Commissioner for Bengal.

The 23rd February 1888.

Statement showing the Results of the Registration of Deaths in the Districts in Bengal for the month of December 1887.

DISTRICTS.		POPULATION.		DEATHS FROM—										RATIO PER 1,000 OF POPULATION PER ANNUM			COMPARISON WITH PREVIOUS PERIODS.			DEATHS AMONG—			SEX.			RATIO PER 1,000 OF POPULATION PER ANNUM			Ratio of male deaths to every 100 female deaths.		
		Males.	Females.	Total.	Cholera.	Small-pox.	Fevers.	Bowel-complaints.	Injury.	Other diseases.	All causes.	Cholera.	Small-pox.	Fevers.	Bowel-complaints.	Injury.	Other diseases.	All causes.	Ratio of deaths in the month of the year to the corresponding month of the previous year.	Ratio of deaths in the month of the year to the corresponding month of the previous year.	Ratio of deaths in the month of the year to the corresponding month of the previous year.	Males.	Females.	Males.	Females.	Males.	Females.	Males.	Females.		
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		10		11		12		13	
		DEATHS AMONG -		CLASS.		DEATHS.		MORTALITY ACCORDING TO -	
		RATIO PER 1,000 OF POPULATION PER ANNUM.		AGE.		RATIO PER 1,000 OF POPULATION PER ANNUM.			

MEMORANDUM.

For the week ending 11th February 1888, the returns from the principal Municipalities in Bengal disclosed the following results:—

1. That births were registered at the rate of 18·4 per 1,000 of population, and deaths at 21·9 per 1,000 as opposed to 19·2 and 24·8 per 1,000, respectively, during the preceding week ending 4th February, indicating a considerable falling off in the registration of deaths.

2. That the undermentioned Municipalities returned the highest proportions of births and deaths:—

<i>Births.</i>			<i>Deaths.</i>		
		Ratio per mille.			Ratio per mille.
Arrah	...	38·3	Utterpara	...	56·6
Narainganj	...	37·3	Suburbs of Calcutta	...	36·8
Monghyr	...	30·7	Ranaghat	...	29·9
Durbhanga	...	29·9	Beaulah	...	28·9
Bhagulpore	...	29·0			

3. That in comparison with the results of the preceding week, the only noticeable point is, that there was a sensible abatement in the mortality from bowel-complaints and the maladies coming under the head of "Other causes," *vide* subjoined table:—

						Ratio per mille during the weeks ending—	
						11th Feb. 1888.	4th Feb. 1888.
Cholera	...	...	...	...	...	1·8	2·4
Small-pox	...	...	...	...	...	·03	·1
Fever	...	...	...	...	...	10·1	9·9
Bowel-complaints	...	...	...	...	...	3·6	4·6
Injury	...	...	...	...	...	·2	·4
Other causes	...	...	...	...	...	6·1	7·4

4. That the greatest suffering from cholera, fever, and "other causes" occurred in the following Municipalities, the other diseases exhibiting no special local severity:—

<i>Cholera.</i>		<i>Fever.</i>		<i>Other causes.</i>	
	Ratio per mille.		Ratio per mille.		Ratio per mille.
Utterpara	28·3	Ranaghat	29·9	Dacca	11·7
Serampore	5·9	Beaulah	26·3	Midnapore	10·8
Howrah	4·6			Arrah	10·8
Suburbs of Calcutta	3·9			Suburbs of Calcutta	9·5
Gya	3·4			Bhagulpore	9·1

5. That the mortality of the week, classified under the heads of *Sex*, *Class* and *Age*, stood as shown below:—

<i>According to Sex.</i>			<i>According to Class.</i>			<i>According to Age.</i>		
		Ratio per mille.			Ratio per mille.			Ratio per mille.
Males	...	23·3	Christians	...	8·7	Under 1 year	...	135·5
Females	...	20·3	Hindus	...	22·7	1 and under 5 years	...	22·3
Ratio of male deaths to every 100 female deaths	130		Mahomedans	...	20·2	5 " 10 "	...	7·1
			Budhists	...	48·4	10 " 15 "	...	10·9
			Other classes	...	36·4	15 " 20 "	...	13·6
						20 " 30 "	...	12·9
						30 " 40 "	...	18·0
						40 " 50 "	...	19·8
						50 " 60 "	...	3·6
						60 years and upwards	...	64·6

R. LIDDERDALE, M.D., Deputy Surgeon-General,

The 25th February 1888.

Sanitary Commissioner for Bengal.

Registration of Births and Deaths in the Principal Municipalities in Bengal during the week ending 11th February 1888.

[illegible]

MORTALITY ACCORDING TO—

Age.

RATIO PER 1,000 OF POPULATION PER ANNUM.

NAME OF MUNICIPAL-
PALITIES.

NAME OF MUNICIPALITY.			DEATHS AMONG—					DEATHS.										RATIO PER 1,000 OF POPULATION PER ANNUM.												
			Hindus.		Mahomedans.		Buddhists.	Other classes.	Under 1 year.		1 and under 5 years.		5 and under 10 years.		10 and under 15 years.		15 and under 20 years.		20 and under 30 years.		30 and under 40 years.		40 and under 50 years.		50 and under 60 years.		60 years and up.			
Burdwan	...	...	11	5	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...
Midnapore	...	...	13	2	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...
Hughli and Chinsurah	...	...	9	6	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...
Serampore	...	...	13	1	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...
...	...	...	6	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...
Howrah	...	...	23	10	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...
Bali	...	...	6	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...
Suburbs of Calcutta	...	...	115	61	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...
Kishinagar	...	...	6	1	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...
Benaghat	...	...	5	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...
Santipore	...	...	8	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...
Jessore	...	...	1	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...
Rampore Beaulah	...	...	6	5	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...
Darjiling	...	...	1	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...
Decca	...	...	17	16	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...
Chittagong	...	...	1	3	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...
Comillah	...	...	4	3	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...
Patna City	...	...	33	5	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...
Gya	...	...	35	3	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...
Arrah	...	...	17	4	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...
Muzaffarpore	...	...	5	3	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...
Durbhanga	...	...	21	6	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...
Chupra	...	...	6	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...
Bhagalpore	...	...	14	7	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...
Monghyr	...	...	14	6	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...
Purneah	...	...	2	2	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...
Puri	...	...	8	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...
TOTAL	...	...	409	132	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...

R. LIDDERDALE, M.D., Deputy Surgeon-General,
Sanitary Commissioner for Bengal.

OFFICE OF SANITARY COMMISSIONER FOR BENGAL.
The 25th February 1888

PUBLIC WORKS DEPARTMENT, —BENGAL.

IRRIGATION BRANCH.

Statement showing heights over mean sea-level and low-water in the Rivers Ganges, Bhagirath, Jellinghee, and Brahmaputra for the month of June 1887.

RIVER GANGES.															RIVER BRAHMAPUTRA.				
Mirzapore.			Benares.		Buxar.		Dinapore.		Monghyr.		Salukunee.		Rampore Beaulah.		G-alundo.		RIVER BHAGIRATHEE.	RIVER JELLINGHEE.	Gowhaty.
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A. D. MCARTHUR Major, R.E.,
Under-Secretary to the Govt. of Bengal

The 28th February 1888.

PUBLIC WORKS DEPARTMENT, —BENGAL.

IRRIGATION BRANCH.

Statement showing heights over mean sea-level and low-water in the Rivers Ganges, Bhagiruth, Jellinghee, and Brahmapootra, for the month of August 1887.

RIVER GANGES.													RIVER BRAHMAPOOTRA.	
													RIVER JELLINGHEE.	
													RIVER BHAGIRATHA.	
Mirzapore.	Benares.	Buxar.	Dinapore.	Mouhlyr.	Sahibganj.	Ranpore Beaulah.	Goalundo.	Berhampore.				Gowhatti.		
Distance.	134.	90.	177.	287.	110.	381.	94.	471.	90.	501.	120.			
Height over zero of gauge, sea-level.	Height over zero of gauge, sea-level.	Height over zero of gauge, sea-level.	Height over zero of gauge, sea-level.	Height over zero of gauge, sea-level.	Height over zero of gauge, sea-level.	Height over zero of gauge, sea-level.	Height over zero of gauge, sea-level.	Height over zero of gauge, sea-level.	Height over zero of gauge, sea-level.	Height over zero of gauge, sea-level.	Height over zero of gauge, sea-level.	Height over zero of gauge, sea-level.		
815.73	87.50	88.90	88.70	82.16	186.01	186.03	89.50	18.35	58.35	18.75	92.60	23.59		
815.72	87.50	88.90	88.70	82.16	186.01	186.03	89.50	18.35	58.35	18.75	92.60	23.59		
815.72	87.50	88.90	88.70	82.16	186.01	186.03	89.50	18.35	58.35	18.75	92.60	23.59		
815.72	87.50	88.90	88.70	82.16	186.01	186.03	89.50	18.35	58.35	18.75	92.60	23.59		
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815.72	87.50	88.90	88.70	82.16	186.01	186.03	89.50	18.35	58.35	18.75	92.60	23.59		
815.72	87.50	88.90	88.70	82.16	186.01	186.03	89.50	18.35	58.35	18.75	92.60	23.59		
815.72	87.50	88.90	88.70	82.16	186.01	186.03	89.50	18.35	58.35	18.75	92.60	23.59		
815.72	87.50	88.90	88.70	82.16	186.01	186.03	89.50	18.35	58.35	18.75	92.60	23.59		
815.72	87.50	88.90	88.70	82.16	186.01	186.03	89.50	18.35	58.35	18.75	92.60	23.59		
815.72	87.50	88.90	88.70	82.16	186.01	186.03	89.50	18.35	58.35	18.75	92.60	23.59		
815.72	87.50	88.90	88.70	82.16	186.01	186.03	89.50	18.35	58.35	18.75	92.60	23.59		
815.72	87.50	88.90	88.70	82.16	186.01	186.03	89.50	18.35	58.35	18.75	92.60	23.59		
815.72	87.50	88.90	88.70	82.16	186.01	186.03	89.50	18.35	58.35	18.75	92.60	23.59		
815.72	87.50	88.90	88.70	82.16	186.01	186.03	89.50	18.35	58.35	18.75	92.60	23.59		
815.72	87.50	88.90	88.70	82.16	186.01	186.03	89.50	18.35	58.35	18.75	92.60	23.59		
815.72	87.50	88.90	88.70	82.16	186.01	186.03	89.50	18.35	58.35	18.75	92.60	23.59		
815.72	87.50	88.90	88.70	82.16	186.01	186.03	89.50	18.35	58.35	18.75	92.60	23.59		
815.72	87.50	88.90	88.70	82.16	186.01	186.03	89.50	18.35	58.35	18.75	92.60	23.59		
815.72	87.50	88.90	88.70	82.16	186.01	186.03	89.50	18.35	58.35	18.75	92.60	23.59		
815.72	87.50	88.90	88.70	82.16	186.01	186.03	89.50	18.35	58.35	18.75	92.60	23.59		
815.72	87.50	88.90	88.70	82.16	186.01	186.03	89.50	18.35	58.35	18.75	92.60	23.59		
815.72	87.50	88.90	88.70	82.16	186.01	186.03	89.50	18.35	58.35	18.75	92.60	23.59		
815.72	87.50	88.90	88.70	82.16	186.01	186.03	89.50	18.35	58.35	18.75	92.60	23.59		
815.72	87.50	88.90	88.70	82.16	186.01	186.03	89.50	18.35	58.35	18.75	92.60	23.59		
815.72	87.50	88.90	88.70	82.16	186.01	186.03	89.50	18.35	58.35	18.75	92.60	23.59		
815.72	87.50	88.90	88.70	82.16	186.01	186.03	89.50	18.35	58.35	18.75	92.60	23.59		
815.72	87.50	88.90	88.70	82.16	186.01	186.03	89.50	18.35	58.35	18.75	92.60	23.59		
815.72	87.50	88.90	88.70	82.16	186.01	186.03	89.50	18.35	58.35	18.75	92.60	23.59		
815.72	87.50	88.90	88.70	82.16	186.01	186.03	89.50	18.35	58.35	18.75	92.60	23.59		
815.72	87.50	88.90	88.70	82.16	186.01	186.03	89.50	18.35	58.35</					

A. D. McARTHUR, Major, R.E.,
Under-Secretary to Govt. of Bengal.

The 28th February 1888.

PUBLIC WORKS DEPARTMENT—BENGAL.
IRRIGATION BRANCH.

Statement showing heights over mean sea-level and low-water in the Rivers Ganges, Bhagirathee, Jellinghee, and Brahmapootra for the month of September 1887.

Date.	RIVER GANGES.										RIVER BRAHMAPOOTRA.	
	Mirzapore.	Benares.	Buxar.	Dinapore.	Monghyr.	Sahibganje.	Rampore Beaulah.	Goalundo.	Berhampore.	Saunpunge.	Barhampore.	Gowhaty.
Distance. Miles.	From Allahabad.	From Allahabad.	From Benares.	From Benares.	From Benares.	From Benares.	From Benares.	From Benares.	From Benares.	From Benares.	From Benares.	From Benares.
	Height over mean of gauge, sea-level.	Height over mean of gauge, sea-level.	Height over mean of gauge, sea-level.	Height over mean of gauge, sea-level.	Height over mean of gauge, sea-level.	Height over mean of gauge, sea-level.	Height over mean of gauge, sea-level.	Height over mean of gauge, sea-level.	Height over mean of gauge, sea-level.	Height over mean of gauge, sea-level.	Height over mean of gauge, sea-level.	Height over mean of gauge, sea-level.
1st	44.50	49.43	30.43	31.70	185.83	25.75	127.60	27.00	94.00	23.70	65.79	29.19
2nd	44.50	49.43	30.43	31.70	185.83	25.75	127.60	27.00	94.00	23.70	65.79	29.19
3rd	44.50	49.43	30.43	31.70	185.83	25.75	127.60	27.00	94.00	23.70	65.79	29.19
4th	44.50	49.43	30.43	31.70	185.83	25.75	127.60	27.00	94.00	23.70	65.79	29.19
5th	44.50	49.43	30.43	31.70	185.83	25.75	127.60	27.00	94.00	23.70	65.79	29.19
6th	44.50	49.43	30.43	31.70	185.83	25.75	127.60	27.00	94.00	23.70	65.79	29.19
7th	44.50	49.43	30.43	31.70	185.83	25.75	127.60	27.00	94.00	23.70	65.79	29.19
8th	44.50	49.43	30.43	31.70	185.83	25.75	127.60	27.00	94.00	23.70	65.79	29.19
9th	44.50	49.43	30.43	31.70	185.83	25.75	127.60	27.00	94.00	23.70	65.79	29.19
10th	44.50	49.43	30.43	31.70	185.83	25.75	127.60	27.00	94.00	23.70	65.79	29.19
11th	44.50	49.43	30.43	31.70	185.83	25.75	127.60	27.00	94.00	23.70	65.79	29.19
12th	44.50	49.43	30.43	31.70	185.83	25.75	127.60	27.00	94.00	23.70	65.79	29.19
13th	44.50	49.43	30.43	31.70	185.83	25.75	127.60	27.00	94.00	23.70	65.79	29.19
14th	44.50	49.43	30.43	31.70	185.83	25.75	127.60	27.00	94.00	23.70	65.79	29.19
15th	44.50	49.43	30.43	31.70	185.83	25.75	127.60	27.00	94.00	23.70	65.79	29.19
16th	44.50	49.43	30.43	31.70	185.83	25.75	127.60	27.00	94.00	23.70	65.79	29.19
17th	44.50	49.43	30.43	31.70	185.83	25.75	127.60	27.00	94.00	23.70	65.79	29.19
18th	44.50	49.43	30.43	31.70	185.83	25.75	127.60	27.00	94.00	23.70	65.79	29.19
19th	44.50	49.43	30.43	31.70	185.83	25.75	127.60	27.00	94.00	23.70	65.79	29.19
20th	44.50	49.43	30.43	31.70	185.83	25.75	127.60	27.00	94.00	23.70	65.79	29.19
21st	44.50	49.43	30.43	31.70	185.83	25.75	127.60	27.00	94.00	23.70	65.79	29.19
22nd	44.50	49.43	30.43	31.70	185.83	25.75	127.60	27.00	94.00	23.70	65.79	29.19
23rd	44.50	49.43	30.43	31.70	185.83	25.75	127.60	27.00	94.00	23.70	65.79	29.19
24th	44.50	49.43	30.43	31.70	185.83	25.75	127.60	27.00	94.00	23.70	65.79	29.19
25th	44.50	49.43	30.43	31.70	185.83	25.75	127.60	27.00	94.00	23.70	65.79	29.19
26th	44.50	49.43	30.43	31.70	185.83	25.75	127.60	27.00	94.00	23.70	65.79	29.19
27th	44.50	49.43	30.43	31.70	185.83	25.75	127.60	27.00	94.00	23.70	65.79	29.19
28th	44.50	49.43	30.43	31.70	185.83	25.75	127.60	27.00	94.00	23.70	65.79	29.19
29th	44.50	49.43	30.43	31.70	185.83	25.75	127.60	27.00	94.00	23.70	65.79	29.19
30th	44.50	49.43	30.43	31.70	185.83	25.75	127.60	27.00	94.00	23.70	65.79	29.19

A. D. MCARTHUR, Major, R. E.
Under-Secy. to the Govt. of Bengal.
The 28th February 1888.

PUBLIC WORKS DEPARTMENT.—BENGAL.

IRRIGATION BRANCH.

Statement showing heights over mean sea-level and low water in the Rivers Ganges, Bhagiruthee, Jellinghee, and Brahmapootra for the month of October 1887.

RIVER GANGES.																	RIVER BHAGIRUTHEE.		RIVER JELDINGHEE.		RIVER BRAHMAPOOTRA.	
Mirzapore.		Benares.		Buxar.		Unjore.		Monghyr.		Sahabganje.		Ranpore Beaulah.		Goulundo.		Berhampore.		Satpiggunge.		Gowhaty.		
Height over zero of gauge, sea-level.	Height over zero of gauge, sea-level.	Height over zero of gauge, sea-level.	Height over zero of gauge, sea-level.	Height over zero of gauge, sea-level.	Height over zero of gauge, sea-level.	Height over zero of gauge, sea-level.	Height over zero of gauge, sea-level.	Height over zero of gauge, sea-level.	Height over zero of gauge, sea-level.	Height over zero of gauge, sea-level.	Height over zero of gauge, sea-level.	Height over zero of gauge, sea-level.	Height over zero of gauge, sea-level.	Height over zero of gauge, sea-level.	Height over zero of gauge, sea-level.	Height over zero of gauge, sea-level.	Height over zero of gauge, sea-level.	Height over zero of gauge, sea-level.	Height over zero of gauge, sea-level.	Height over zero of gauge, sea-level.	Height over zero of gauge, sea-level.	
1st	18.35	215.50	17.17	15.22	21.50	15.03	15.58	117.43	17.83	65.83	17.54	59.54	17.50	26.44	23.44	55.20	24.08	29.39	19.40	168.16		
2nd	18.00	214.30	16.17	14.52	21.10	14.54	14.90	116.85	17.08	64.34	16.67	58.67	17.03	25.94	22.94	54.11	23.53	27.63	18.10	167.52		
3rd	17.67	213.30	15.75	14.10	20.70	14.13	14.53	116.14	16.34	63.84	16.34	57.83	16.34	25.44	22.44	53.61	23.02	27.12	17.59	166.88		
4th	16.85	212.90	14.78	13.63	20.30	13.73	14.07	115.32	15.94	63.34	15.83	56.84	15.65	24.94	21.94	52.90	22.51	26.61	17.08	166.24		
5th	16.17	212.90	14.08	13.03	19.80	13.03	13.67	114.92	15.65	62.84	15.03	55.84	14.96	24.44	21.44	52.38	22.00	26.10	16.57	165.60		
6th	15.58	211.80	13.00	12.63	19.40	12.63	13.27	114.52	14.96	62.34	14.83	54.84	14.29	23.94	20.94	51.86	21.49	25.59	16.06	164.96		
7th	15.17	211.22	12.84	12.34	19.00	12.34	12.87	114.52	14.00	61.84	13.93	53.84	13.62	23.44	20.44	51.34	20.98	25.08	15.55	164.32		
8th	14.75	210.80	12.50	12.00	18.60	12.00	12.55	114.53	13.62	61.34	13.23	52.84	12.95	22.94	19.94	50.82	20.47	24.57	15.04	163.68		
9th	14.25	210.30	12.33	11.73	18.20	11.73	12.22	114.53	13.23	60.84	12.73	51.84	12.28	22.44	19.44	49.78	19.45	24.06	14.53	163.04		
10th	13.75	209.97	12.17	11.52	17.80	11.52	11.99	114.53	12.83	60.34	12.43	50.84	11.61	21.94	18.94	49.26	18.94	23.55	14.02	162.40		
11th	13.25	209.47	11.93	11.31	17.40	11.31	11.64	114.53	12.43	59.84	12.13	49.84	10.94	21.44	18.44	48.74	18.43	23.04	13.51	161.76		
12th	12.90	208.89	11.83	11.05	17.00	11.05	11.35	114.53	12.03	59.34	11.83	48.84	10.27	20.94	17.94	48.22	17.92	22.53	13.00	161.12		
13th	12.67	208.30	11.67	10.83	16.60	10.83	11.07	114.53	11.64	58.84	11.53	47.84	9.60	20.44	17.44	47.70	17.41	22.02	12.49	160.48		
14th	12.33	207.80	11.50	10.59	16.20	10.59	10.76	114.53	11.23	58.34	11.23	46.84	8.93	19.94	16.94	47.18	16.90	21.51	11.98	159.84		
15th	12.00	207.30	11.37	10.35	15.80	10.35	10.43	114.53	10.93	57.84	10.93	45.84	8.26	19.44	16.44	46.66	16.39	21.00	11.47	159.20		
16th	11.67	206.80	11.20	10.11	15.40	10.11	10.10	114.53	10.53	57.34	10.63	44.84	7.59	18.94	15.94	46.14	15.88	20.49	10.96	158.56		
17th	11.35	206.30	11.02	9.87	15.00	9.87	9.75	114.53	10.13	56.84	10.33	43.84	6.92	18.44	15.44	45.62	15.37	19.98	10.45	157.92		
18th	11.02	205.80	10.85	9.63	14.60	9.63	9.42	114.53	9.73	56.34	10.03	42.84	6.25	17.94	14.94	45.10	14.86	19.49	9.94	157.28		
19th	10.70	205.30	10.67	9.40	14.20	9.40	9.20	114.53	9.33	55.84	9.73	41.84	5.58	17.44	14.44	44.58	14.35	18.98	9.43	156.64		
20th	10.37	204.80	10.50	9.17	13.80	9.17	8.97	114.53	9.03	55.34	9.43	40.84	4.91	16.94	13.94	44.06	13.84	18.47	8.92	156.00		
21st	10.04	204.30	10.33	8.92	13.40	8.92	8.72	114.53	8.83	54.84	9.13	39.84	4.24	16.44	13.44	43.54	13.33	17.96	8.41	155.36		
22nd	9.72	203.80	10.16	8.67	13.00	8.67	8.52	114.53	8.53	54.34	8.83	38.84	3.57	15.94	12.94	43.02	12.82	17.45	7.90	154.72		
23rd	9.40	203.30	9.99	8.42	12.60	8.42	8.30	114.53	8.23	53.84	8.53	37.84	2.90	15.44	12.44	42.50	12.31	16.94	7.39	154.08		
24th	9.08	202.80	9.82	8.17	12.20	8.17	8.05	114.53	7.93	53.34	8.23	36.84	2.23	14.94	11.94	41.98	11.80	16.43	6.88	153.44		
25th	8.76	202.30	9.65	7.92	11.80	7.92	7.79	114.53	7.63	52.84	7.93	35.84	1.56	14.44	11.44	41.46	11.29	15.92	6.37	152.80		
26th	8.44	201.80	9.48	7.67	11.40	7.67	7.55	114.53	7.33	52.34	7.63	34.84	0.89	13.94	10.94	40.94	10.78	15.41	5.86	152.16		
27th	8.12	201.30	9.31	7.42	11.00	7.42	7.30	114.53	7.03	51.84	7.33	33.84	0.22	13.44	9.94	40.42	10.27	14.90	5.35	151.52		
28th	7.80	200.80	9.14	7.17	10.60	7.17	7.05	114.53	6.73	51.34	7.03	32.84	0.00	12.94	9.44	39.90	9.76	14.39	4.84	150.88		
29th	7.48	200.30	8.97	6.92	10.20	6.92	6.79	114.53	6.43	50.84	6.73	31.84	0.00	12.44	8.94	39.38	9.25	13.88	4.33	150.24		
30th	7.16	199.80	8.80	6.67	9.80	6.67	6.55	114.53	6.13	50.34	6.43	30.84	0.00	11.94	8.44	38.86	8.74	13.37	3.82	149.60		
31st	6.84	199.30	8.63	6.42	9.40	6.42	6.29	114.53	5.83	49.84	6.13	29.84	0.00	11.44	7.94	38.34	8.23	12.86	3.31	148.96		

A. D. MCARTHUR, Major. R. E.

Under-Secretary to the Government of Bengal.

The 28th February 1888.

PUBLIC WORKS DEPARTMENT, —BENGAL.

IRRIGATION BRANCH.

Statement showing heights over mean sea-level and low-water in the Ritters Ganges, Jellinghee, and Brahmapootra for the month of November 1887.

RIVER GANGES.																	RIVER JELLINGHEE.		RIVER BRAHMAPOOTRA.			
Mirzapore.			Benares.		Buxar.		Unnapore.		Monghyr.		Sahebgunge.		Rampore Beaulah.		Goalundo.		Derhampore.		Ssrupgunge.		Gowhatty.	
Miles.	From Allahabad.	From Allahabad.	From Allahabad.	From Allahabad.	From Allahabad.	From Allahabad.	From Allahabad.	From Allahabad.	From Allahabad.	From Allahabad.	From Allahabad.	From Allahabad.	From Allahabad.	From Allahabad.	From Allahabad.	From Allahabad.	From Allahabad.	From Allahabad.	From Allahabad.	From Allahabad.	From Allahabad.	From Allahabad.
Height over zero mean of gauge, sea-level.	Height over zero mean of gauge, sea-level.	Height over zero mean of gauge, sea-level.	Height over zero mean of gauge, sea-level.	Height over zero mean of gauge, sea-level.	Height over zero mean of gauge, sea-level.	Height over zero mean of gauge, sea-level.	Height over zero mean of gauge, sea-level.	Height over zero mean of gauge, sea-level.	Height over zero mean of gauge, sea-level.	Height over zero mean of gauge, sea-level.	Height over zero mean of gauge, sea-level.	Height over zero mean of gauge, sea-level.	Height over zero mean of gauge, sea-level.	Height over zero mean of gauge, sea-level.	Height over zero mean of gauge, sea-level.	Height over zero mean of gauge, sea-level.	Height over zero mean of gauge, sea-level.	Height over zero mean of gauge, sea-level.	Height over zero mean of gauge, sea-level.	Height over zero mean of gauge, sea-level.	Height over zero mean of gauge, sea-level.	Height over zero mean of gauge, sea-level.
1st	8.25	214.47	8.87	205.67	8.75	177.60	11.75	143.98	9.33	111.19	10.46	53.46	12.00	45.74	12.50	155.96	6.50	155.96	6.50	155.96	6.50	155.96
2nd	8.08	214.47	8.75	205.35	8.58	177.63	11.75	143.73	9.00	110.55	10.17	51.17	11.58	45.32	12.12	154.90	6.25	154.90	6.25	154.90	6.25	154.90
3rd	7.75	213.97	8.58	205.35	8.41	177.63	11.75	143.73	8.75	110.55	9.83	51.17	11.58	45.32	11.83	154.90	5.90	154.90	5.90	154.90	5.90	154.90
4th	7.38	213.97	8.41	205.35	8.25	177.63	11.75	143.73	8.42	110.55	9.50	51.17	11.58	45.32	11.50	154.90	5.66	154.90	5.66	154.90	5.66	154.90
5th	7.42	213.64	8.41	204.84	8.25	177.30	11.75	143.88	7.92	109.77	9.33	51.33	11.60	44.57	11.42	153.76	5.40	153.76	5.40	153.76	5.40	153.76
6th	7.33	213.55	8.41	204.84	8.09	177.30	11.75	143.88	7.75	109.43	9.00	51.04	11.50	44.07	11.07	151.54	5.16	151.54	5.16	151.54	5.16	151.54
7th	7.11	213.39	8.41	204.63	7.91	177.30	11.75	143.88	7.58	109.43	8.83	50.83	11.33	43.74	10.57	149.76	4.90	149.76	4.90	149.76	4.90	149.76
8th	7.06	213.22	8.41	204.47	7.75	176.80	11.75	143.88	7.33	109.18	8.67	50.58	11.17	43.21	10.25	147.53	4.60	147.53	4.60	147.53	4.60	147.53
9th	6.92	213.14	8.41	204.30	7.58	176.80	11.75	143.88	7.00	108.93	8.29	50.29	11.02	42.91	10.03	145.30	4.30	145.30	4.30	145.30	4.30	145.30
10th	6.75	212.97	8.41	204.12	7.42	176.80	11.75	143.88	6.83	108.68	8.08	50.08	10.87	42.54	9.83	143.07	4.00	143.07	4.00	143.07	4.00	143.07
11th	6.15	212.97	8.41	204.05	7.25	176.80	11.75	143.88	6.50	108.43	7.87	49.87	10.62	42.17	9.58	140.84	3.70	140.84	3.70	140.84	3.70	140.84
12th	6.09	212.97	8.41	203.88	7.09	176.80	11.75	143.88	6.33	108.18	7.70	49.63	10.37	41.79	9.30	138.61	3.40	138.61	3.40	138.61	3.40	138.61
13th	6.05	212.72	8.41	203.71	7.42	176.80	11.75	143.88	6.17	107.93	7.50	49.39	10.12	41.40	9.03	136.38	3.10	136.38	3.10	136.38	3.10	136.38
14th	6.17	212.47	8.41	203.54	7.33	176.80	11.75	143.88	6.00	107.68	7.33	49.15	9.87	41.01	8.76	134.15	2.80	134.15	2.80	134.15	2.80	134.15
15th	6.00	212.30	8.41	203.37	7.17	176.80	11.75	143.88	5.83	107.43	7.00	48.90	9.60	40.62	8.54	131.92	2.50	131.92	2.50	131.92	2.50	131.92
16th	5.93	212.05	8.41	203.20	7.00	176.80	11.75	143.88	5.67	107.18	6.83	48.66	9.33	40.23	8.27	129.69	2.20	129.69	2.20	129.69	2.20	129.69
17th	5.75	211.97	8.41	203.03	6.83	176.80	11.75	143.88	5.50	106.93	6.50	48.42	9.02	39.84	8.00	127.46	1.90	127.46	1.90	127.46	1.90	127.46
18th	5.67	211.80	8.41	202.86	6.67	176.80	11.75	143.88	5.33	106.68	6.25	48.18	8.71	39.45	7.70	125.23	1.60	125.23	1.60	125.23	1.60	125.23
19th	5.50	211.63	8.41	202.69	6.50	176.80	11.75	143.88	5.17	106.43	6.00	47.94	8.40	39.06	7.40	123.00	1.30	123.00	1.30	123.00	1.30	123.00
20th	5.38	211.46	8.41	202.52	6.33	176.80	11.75	143.88	5.00	106.18	5.75	47.70	8.10	38.67	7.10	120.77	1.00	120.77	1.00	120.77	1.00	120.77
21st	5.20	211.29	8.41	202.35	6.17	176.80	11.75	143.88	4.83	105.93	5.50	47.46	7.80	38.28	6.80	118.54	0.70	118.54	0.70	118.54	0.70	118.54
22nd	5.13	211.12	8.41	202.18	6.00	176.80	11.75	143.88	4.67	105.68	5.25	47.22	7.50	37.89	6.50	116.31	0.40	116.31	0.40	116.31	0.40	116.31
23rd	5.05	210.95	8.41	202.01	5.83	176.80	11.75	143.88	4.50	105.43	5.00	46.98	7.20	37.50	6.20	114.08	0.10	114.08	0.10	114.08	0.10	114.08
24th	4.98	210.78	8.41	201.84	5.67	176.80	11.75	143.88	4.33	105.18	4.75	46.74	6.90	37.11	5.90	111.85	0.00	111.85	0.00	111.85	0.00	111.85
25th	4.90	210.61	8.41	201.67	5.50	176.80	11.75	143.88	4.17	104.93	4.50	46.50	6.60	36.72	5.60	109.62	0.00	109.62	0.00	109.62	0.00	109.62
26th	4.83	210.44	8.41	201.50	5.33	176.80	11.75	143.88	4.00	104.68	4.25	46.26	6.30	36.33	5.30	107.39	0.00	107.39	0.00	107.39	0.00	107.39
27th	4.76	210.27	8.41	201.33	5.17	176.80	11.75	143.88	3.83	104.43	4.00	46.02	6.00	35.94	5.00	105.16	0.00	105.16	0.00	105.16	0.00	105.16
28th	4.69	210.10	8.41	201.16	5.00	176.80	11.75	143.88	3.67	104.18	3.75	45.78	5.75	35.55	4.70	102.91	0.00	102.91	0.00	102.91	0.00	102.91
29th	4.62	210.00	8.41	201.00	4.83	176.80	11.75	143.88	3.50	103.93	3.50	45.54	5.50	35.16	4.40	100.64	0.00	100.64	0.00	100.64	0.00	100.64
30th	4.55	210.00	8.41	200.83	4.67	176.80	11.75	143.88	3.33	103.68	3.33	45.30	5.25	34.77	4.10	98.37	0.00	98.37	0.00	98.37	0.00	98.37
31st	4.48	210.00	8.41	200.66	4.50	176.80	11.75	143.88	3.17	103.43	3.17	45.06	5.00	34.38	3.80	96.10	0.00	96.10	0.00	96.10	0.00	96.10

A. D. McARTHUR, Major, R.E.
Under-Secretary to the Govt. of Bengal.

The 25th February 1888.

PUBLIC WORKS DEPARTMENT—BENGAL.

IRRIGATION BRANCH.

Statement showing heights over mean sea-level and to c-water in the Rivers Ganges, Bhagiruthi, Jellinghee, and Brahmapootra for the month of December 1887.

Date.	RIVER GANGES.										RIVER BHAGIRUTHI.		RIVER JELLINGHEE.		RIVER BRAHMAPOOTRA.		
	Mirzapore.	Benares.	Ruxar.	Dusapore.	Monghyr.	Sahelungunge.	Rampore Beaulab.	Goalundo.	Berhampore.	Sarungunge.	Gowhatly.	Height over zero of gauge.	Height over mean of gauge.	Height over zero of gauge.	Height over mean of gauge.	Height over zero of gauge.	Height over mean of gauge.
1st	4.92	210.14	5.75	10.95	145.18	3.30	7.25	4.30	4.57	4.92	13.86	4.97	6.25	3.61	1.55	4.97	6.25
2nd	4.75	209.97	5.58	10.55	145.04	3.50	7.23	4.30	4.79	4.92	13.86	4.79	6.25	3.53	1.55	4.79	6.25
3rd	4.50	210.80	5.33	10.70	144.93	3.42	7.21	4.17	4.67	4.92	13.86	4.67	6.25	3.49	1.51	4.67	6.25
4th	4.33	210.72	5.17	10.80	144.83	3.37	7.19	4.00	4.58	4.92	13.86	4.58	6.25	3.41	1.51	4.58	6.25
5th	4.33	210.55	5.08	10.90	144.73	3.24	7.18	3.84	4.46	4.92	13.86	4.46	6.25	3.32	1.47	4.46	6.25
6th	4.17	210.39	5.00	10.40	144.63	3.33	7.17	3.67	4.33	4.92	13.86	4.33	6.25	3.24	1.47	4.33	6.25
7th	4.08	210.30	4.92	10.40	144.53	3.24	7.15	3.50	4.19	4.92	13.86	4.19	6.25	3.11	1.43	4.19	6.25
8th	4.00	210.22	4.83	10.30	144.43	3.23	7.14	3.33	4.00	4.92	13.86	4.00	6.25	2.98	1.40	4.00	6.25
9th	3.83	210.05	4.75	10.25	144.33	3.21	7.13	3.17	3.87	4.92	13.86	3.87	6.25	2.89	1.37	3.87	6.25
10th	3.75	209.97	4.67	10.20	144.23	3.17	7.12	3.00	3.79	4.92	13.86	3.79	6.25	2.81	1.35	3.79	6.25
11th	3.67	209.89	4.59	10.15	144.13	3.13	7.11	2.83	3.69	4.92	13.86	3.69	6.25	2.72	1.33	3.69	6.25
12th	3.59	209.80	4.51	10.10	144.03	3.08	7.10	2.67	3.58	4.92	13.86	3.58	6.25	2.63	1.31	3.58	6.25
13th	3.52	209.64	4.43	10.05	143.93	3.03	7.09	2.50	3.48	4.92	13.86	3.48	6.25	2.54	1.29	3.48	6.25
14th	3.43	209.55	4.35	10.00	143.83	2.98	7.08	2.33	3.37	4.92	13.86	3.37	6.25	2.45	1.27	3.37	6.25
15th	3.35	209.47	4.27	9.95	143.73	2.93	7.07	2.17	3.26	4.92	13.86	3.26	6.25	2.36	1.25	3.26	6.25
16th	3.25	209.39	4.19	9.90	143.63	2.88	7.06	2.00	3.15	4.92	13.86	3.15	6.25	2.27	1.23	3.15	6.25
17th	3.17	209.30	4.11	9.85	143.53	2.83	7.05	1.83	3.04	4.92	13.86	3.04	6.25	2.18	1.21	3.04	6.25
18th	3.08	209.22	4.03	9.80	143.43	2.78	7.04	1.67	2.93	4.92	13.86	2.93	6.25	2.09	1.19	2.93	6.25
19th	2.99	209.14	3.95	9.75	143.33	2.73	7.03	1.50	2.82	4.92	13.86	2.82	6.25	2.00	1.17	2.82	6.25
20th	2.92	209.06	3.87	9.70	143.23	2.68	7.02	1.33	2.71	4.92	13.86	2.71	6.25	1.91	1.15	2.71	6.25
21st	2.83	208.98	3.79	9.65	143.13	2.63	7.01	1.17	2.60	4.92	13.86	2.60	6.25	1.82	1.13	2.60	6.25
22nd	2.75	208.89	3.71	9.60	143.03	2.58	7.00	1.00	2.49	4.92	13.86	2.49	6.25	1.73	1.11	2.49	6.25
23rd	2.68	208.80	3.63	9.55	142.93	2.53	6.99	0.83	2.38	4.92	13.86	2.38	6.25	1.64	1.09	2.38	6.25
24th	2.58	208.72	3.55	9.50	142.83	2.48	6.98	0.67	2.27	4.92	13.86	2.27	6.25	1.55	1.07	2.27	6.25
25th	2.50	208.64	3.47	9.45	142.73	2.43	6.97	0.50	2.16	4.92	13.86	2.16	6.25	1.46	1.05	2.16	6.25
26th	2.42	208.56	3.39	9.40	142.63	2.38	6.96	0.33	2.05	4.92	13.86	2.05	6.25	1.37	1.03	2.05	6.25
27th	2.33	208.48	3.31	9.35	142.53	2.33	6.95	0.17	1.94	4.92	13.86	1.94	6.25	1.28	1.01	1.94	6.25
28th	2.25	208.40	3.23	9.30	142.43	2.28	6.94	0.00	1.83	4.92	13.86	1.83	6.25	1.19	0.99	1.83	6.25
29th	2.17	208.32	3.15	9.25	142.33	2.23	6.93	Below zero	1.72	4.92	13.86	1.72	6.25	1.10	0.97	1.72	6.25
30th	2.09	208.24	3.07	9.20	142.23	2.18	6.92	Below zero	1.61	4.92	13.86	1.61	6.25	1.01	0.95	1.61	6.25
31st	2.00	208.16	2.99	9.15	142.13	2.13	6.91	Below zero	1.50	4.92	13.86	1.50	6.25	0.92	0.93	1.50	6.25
1st	1.92	208.08	2.91	9.10	142.03	2.08	6.90	Below zero	1.41	4.92	13.86	1.41	6.25	0.83	0.91	1.41	6.25
2nd	1.84	208.00	2.83	9.05	141.93	2.03	6.89	Below zero	1.32	4.92	13.86	1.32	6.25	0.74	0.89	1.32	6.25
3rd	1.76	207.92	2.75	9.00	141.83	1.98	6.88	Below zero	1.23	4.92	13.86	1.23	6.25	0.65	0.87	1.23	6.25
4th	1.68	207.84	2.67	8.95	141.73	1.93	6.87	Below zero	1.14	4.92	13.86	1.14	6.25	0.56	0.85	1.14	6.25
5th	1.60	207.76	2.59	8.90	141.63	1.88	6.86	Below zero	1.05	4.92	13.86	1.05	6.25	0.47	0.83	1.05	6.25
6th	1.52	207.68	2.51	8.85	141.53	1.83	6.85	Below zero	0.96	4.92	13.86	0.96	6.25	0.38	0.81	0.96	6.25
7th	1.44	207.60	2.43	8.80	141.43	1.78	6.84	Below zero	0.87	4.92	13.86	0.87	6.25	0.29	0.79	0.87	6.25
8th	1.36	207.52	2.35	8.75	141.33	1.73	6.83	Below zero	0.78	4.92	13.86	0.78	6.25	0.20	0.77	0.78	6.25
9th	1.28	207.44	2.27	8.70	141.23	1.68	6.82	Below zero	0.69	4.92	13.86	0.69	6.25	0.11	0.75	0.69	6.25
10th	1.20	207.36	2.19	8.65	141.13	1.63	6.81	Below zero	0.60	4.92	13.86	0.60	6.25	0.02	0.73	0.60	6.25
11th	1.12	207.28	2.11	8.60	141.03	1.58	6.80	Below zero	0.51	4.92	13.86	0.51	6.25	Below zero	0.71	0.51	6.25
12th	1.04	207.20	2.03	8.55	140.93	1.53	6.79	Below zero	0.42	4.92	13.86	0.42	6.25	Below zero	0.69	0.42	6.25
13th	0.96	207.12	1.95	8.50	140.83	1.48	6.78	Below zero	0.33	4.92	13.86	0.33	6.25	Below zero	0.67	0.33	6.25
14th	0.88	207.04	1.87	8.45	140.73	1.43	6.77	Below zero	0.24	4.92	13.86	0.24	6.25	Below zero	0.65	0.24	6.25
15th	0.80	206.96	1.79	8.40	140.63	1.38	6.76	Below zero	0.15	4.92	13.86	0.15	6.25	Below zero	0.63	0.15	6.25
16th	0.72	206.88	1.71	8.35	140.53	1.33	6.75	Below zero	0.06	4.92	13.86	0.06	6.25	Below zero	0.61	0.06	6.25
17th	0.64	206.80	1.63	8.30	140.43	1.28	6.74	Below zero	0.00	4.92	13.86	0.00	6.25	Below zero	0.59	0.00	6.25
18th	0.56	206.72	1.55	8.25	140.33	1.23	6.73	Below zero	0.00	4.92	13.86	0.00	6.25	Below zero	0.57	0.00	6.25
19th	0.48	206.64	1.47	8.20	140.23	1.18	6.72	Below zero	0.00	4.92	13.86	0.00	6.25	Below zero	0.55	0.00	6.25
20th	0.40	206.56	1.39	8.15	140.13	1.13	6.71	Below zero	0.00	4.92	13.86	0.00	6.25	Below zero	0.53	0.00	6.25
21st	0.32	206.48	1.31	8.10	140.03	1.08	6.70	Below zero	0.00	4.92	13.86	0.00	6.25	Below zero	0.51	0.00	6.25
22nd	0.24	206.40	1.23	8.05	139.93	1.03	6.69	Below zero	0.00	4.92	13.86	0.00	6.25	Below zero	0.49	0.00	6.25
23rd	0.16	206.32	1.15	8.00	139.83	0.98	6.68	Below zero	0.00	4.92	13.86	0.00	6.25	Below zero	0.47	0.00	6.25
24th	0.08	206.24	1.07	7.95	139.73	0.93	6.67	Below zero	0.00	4.92	13.86	0.00	6.25	Below zero	0.45	0.00	6.25
25th	0.00	206.16	0.99	7.90	139.63	0.88	6.66	Below zero	0.00	4.92	13.86	0.00	6.25	Below zero	0.43	0.00	6.25
26th	0.00	206.08	0.91	7.85	139.53	0.83	6.65	Below zero	0.00	4.92	13.86	0.00	6.25	Below zero	0.41	0.00	6.25
27th	0.00	206.00	0.83	7.80	139.43	0.78	6.64	Below zero	0.00	4.92	13.86	0.00	6.25	Below zero	0.39	0.00	6.25
28th	0.00	205.92	0.75	7.75	139.33	0.73	6.63	Below zero	0.00	4.92	13.86	0.00	6.25	Below zero	0.37	0.00	6.25
29th	0.00	205.84	0.67	7.70	139.23	0.68	6.62	Below zero	0.00	4.92	13.86	0.00	6.25	Below zero	0.35	0.00	6.25
30th	0.00	205.76	0.59	7.65	139.13	0.63	6.61	Below zero	0.00	4.92	13.86	0.00	6.25	Below zero	0.33	0.00	6.25
31st	0.00	205.68	0.51	7.60	139.03	0.58	6.60	Below zero	0.00	4.92	13.86	0.00	6.25	Below zero	0.31	0.00	6.25

A. D. McARTHUR, Major, R.E.
Under-Secretary to the Govt. of Bengal.

The 28th February 1888.

PUBLIC WORKS DEPARTMENT, —BENGAL.

IRRIGATION BRANCH.

Statement showing heights over mean sea-level and low-water in the Rivers Ganges, Bhagiruttee, Jellinghee and Brahmapootra for the month of January 1888.

RIVER GANGES.												RIVER BHAGIRUTTEE. RIVER JELLINGHEE. BRAHMAPOOTRA.	
	Mirzapore.	Benares.	Buxar.	Dinapore.	Monghyr.	Sahelgunge.	Rampore Beaulah.	Goolundo.	Berhampore.	Sarungpore.	Gowhaty.		
Miles.	89.	134.	48.	177.	287.	110.	381.	94.	171.	90.	190.		
	From Allahabad.	From Allahabad.	From Allahabad.	From Allahabad.	From Allahabad.	From Allahabad.	From Allahabad.	From Allahabad.	From Allahabad.	From Allahabad.	From Allahabad.		
	Height over zero of gauge, sea-level.	Height over zero of gauge, sea-level.	Height over zero of gauge, sea-level.	Height over zero of gauge, sea-level.	Height over zero of gauge, sea-level.	Height over zero of gauge, sea-level.	Height over zero of gauge, sea-level.	Height over zero of gauge, sea-level.	Height over zero of gauge, sea-level.	Height over zero of gauge, sea-level.	Height over zero of gauge, sea-level.		
1st	206.24	204	206.24	206.24	206.24	206.24	206.24	206.24	206.24	206.24	206.24		
2nd	206.24	204	206.24	206.24	206.24	206.24	206.24	206.24	206.24	206.24	206.24		
3rd	206.24	204	206.24	206.24	206.24	206.24	206.24	206.24	206.24	206.24	206.24		
4th	206.24	204	206.24	206.24	206.24	206.24	206.24	206.24	206.24	206.24	206.24		
5th	206.24	204	206.24	206.24	206.24	206.24	206.24	206.24	206.24	206.24	206.24		
6th	206.24	204	206.24	206.24	206.24	206.24	206.24	206.24	206.24	206.24	206.24		
7th	206.24	204	206.24	206.24	206.24	206.24	206.24	206.24	206.24	206.24	206.24		
8th	206.24	204	206.24	206.24	206.24	206.24	206.24	206.24	206.24	206.24	206.24		
9th	206.24	204	206.24	206.24	206.24	206.24	206.24	206.24	206.24	206.24	206.24		
10th	206.24	204	206.24	206.24	206.24	206.24	206.24	206.24	206.24	206.24	206.24		
11th	206.24	204	206.24	206.24	206.24	206.24	206.24	206.24	206.24	206.24	206.24		
12th	206.24	204	206.24	206.24	206.24	206.24	206.24	206.24	206.24	206.24	206.24		
13th	206.24	204	206.24	206.24	206.24	206.24	206.24	206.24	206.24	206.24	206.24		
14th	206.24	204	206.24	206.24	206.24	206.24	206.24	206.24	206.24	206.24	206.24		
15th	206.24	204	206.24	206.24	206.24	206.24	206.24	206.24	206.24	206.24	206.24		
16th	206.24	204	206.24	206.24	206.24	206.24	206.24	206.24	206.24	206.24	206.24		
17th	206.24	204	206.24	206.24	206.24	206.24	206.24	206.24	206.24	206.24	206.24		
18th	206.24	204	206.24	206.24	206.24	206.24	206.24	206.24	206.24	206.24	206.24		
19th	206.24	204	206.24	206.24	206.24	206.24	206.24	206.24	206.24	206.24	206.24		
20th	206.24	204	206.24	206.24	206.24	206.24	206.24	206.24	206.24	206.24	206.24		
21st	206.24	204	206.24	206.24	206.24	206.24	206.24	206.24	206.24	206.24	206.24		
22nd	206.24	204	206.24	206.24	206.24	206.24	206.24	206.24	206.24	206.24	206.24		
23rd	206.24	204	206.24	206.24	206.24	206.24	206.24	206.24	206.24	206.24	206.24		
24th	206.24	204	206.24	206.24	206.24	206.24	206.24	206.24	206.24	206.24	206.24		
25th	206.24	204	206.24	206.24	206.24	206.24	206.24	206.24	206.24	206.24	206.24		
26th	206.24	204	206.24	206.24	206.24	206.24	206.24	206.24	206.24	206.24	206.24		
27th	206.24	204	206.24	206.24	206.24	206.24	206.24	206.24	206.24	206.24	206.24		
28th	206.24	204	206.24	206.24	206.24	206.24	206.24	206.24	206.24	206.24	206.24		
29th	206.24	204	206.24	206.24	206.24	206.24	206.24	206.24	206.24	206.24	206.24		
30th	206.24	204	206.24	206.24	206.24	206.24	206.24	206.24	206.24	206.24	206.24		
31st	206.24	204	206.24	206.24	206.24	206.24	206.24	206.24	206.24	206.24	206.24		

A. D. McARTHUR, Major, R.E.
Under-Secy. to the Govt. of Bengal.
The 28th February 1888.

CIRCULAR AND EASTERN CANALS.

*Approximate Return of Traffic for the week ending Saturday, the 25th February 1888,
as compared with the corresponding week of the previous year.*

NATURE OF CARGO.	WEEK ENDING SATURDAY, THE 25TH FEBRUARY 1888.			WEEK ENDING SATURDAY, THE 26TH FEBRUARY 1887.		
	Number of boats.	Weight of cargo.	Tollage.	Number of boats.	Weight of cargo.	Tollage.
	No.	Mds.	Rs.	No.	Mds.	Rs.
Rice and paddy	1,811	4,41,552	7,487	1,569	3,58,220	6,098
Jute	96	62,000	1,139	128	83,782	1,595
Firewood	133	74,600	1,022	212	82,369	1,264
Other articles	1,069	2,83,195	4,613	1,291	3,14,565	5,046
Total	3,109	8,61,347	14,261	3,200	8,38,927	14,003

Eastern Bengal State Railway.

Abstract of principal commodities carried over the Eastern Bengal State Railway during the month of November 1887, as compared with the same month of the previous year.

STAPLES.	1887.		1886.		TOTAL.		Increase.	Decrease.
	Up.	Down.	Up.	Down.	1887.	1886.		
	Tons.	Tons.	Tons.	Tons.	Tons.	Tons.	Tons.	Tons.
Coal	5,044	2,529	1,874	487	7,374	2,361	5,012	.....
Cotton, raw	77	57	39	40	124	70	54	.....
Cotton, twist and yarn—								
1.—European	.....	.....	.....	.....	.....	.....	.....	.....
2.—Indian	.....	.....	.....	.....	.....	.....	.....	.....
Cotton piece-goods—								
1.—European—								
a.—In bales and bundles	3,688	235	2,328	129	3,923	2,457	1,466	.....
b.—In boxes	.....	.....	.....	.....	.....	.....	.....	.....
2.—Indian—								
a.—In bales and bundles	.....	.....	.....	.....	.....	.....	.....	.....
b.—In boxes	.....	.....	.....	.....	.....	.....	.....	.....
Grains—								
2.—Rice	2,518	1,572	241	2,722	4,160	2,962	1,197	.....
5.—Others	861	8,759	176	1,121	9,620	1,297	8,323	.....
Hides and Skins—								
1.—Hides of cattle—								
a.—Dressed	.....	.....	.....	.....	.....	.....	.....	.....
b.—Undressed	.....	.....	.....	.....	.....	.....	.....	.....
2.—Skins of sheep, &c.—								
a.—Dressed	12	627	19	592	639	611	28	.....
b.—Undressed	.....	.....	.....	.....	.....	.....	.....	.....
Jute—								
1.—Raw—								
a.—Screwed	.....	5,665	.....	4,229	5,665	4,229	1,436	.....
b.—Unscrewed	.....	45,093	1	27,545	45,093	27,546	17,547	.....
2.—Gunny-bags and cloth	135	2,036	61	1,776	2,171	1,837	334	.....
Metals—								
1.—Copper, unwrought	.....	.....	.....	.....	.....	.....	.....	.....
2.—Brass, unwrought	.....	.....	.....	.....	.....	.....	.....	.....
3.—Brass and copper, wrought	.....	.....	.....	.....	.....	.....	.....	.....
4.—Iron	1,645	112	883	62	1,787	945	842	.....
5.—Tin	.....	.....	.....	.....	.....	.....	.....	.....
6.—Others	.....	.....	.....	.....	.....	.....	.....	.....
Oils—								
2.—Kerosine	382	19	.....	.....	401	.....	401	.....
5.—Others	213	32	448	18	245	466	.....	221
Oilseeds—								
1.—Linseed	.....	.....	.....	.....	.....	.....	.....	.....
2.—Rape and mustard	.....	.....	.....	.....	.....	.....	.....	.....
3.—Til or gingelly	.....	.....	.....	.....	.....	.....	.....	.....
4.—Niger	367	608	275	195	975	470	505	.....
5.—Castor	.....	.....	.....	.....	.....	.....	.....	.....
6.—Poppy	.....	.....	.....	.....	.....	.....	.....	.....
7.—Others	.....	.....	.....	.....	.....	.....	.....	.....
Provisions—								
2.—Betelnuts	87	703	39	698	790	737	53	.....
5.—Others	360	287	173	196	647	369	278	.....
Railway plant and rolling-stock	5,934	1,676	1,016	2,113	7,510	3,129	4,381	.....
Salt	4,173	5	3,911	6	4,178	3,917	261	.....
Sugar—								
1.—Drained	514	89	360	136	603	496	107	.....
2.—Undrained	.....	.....	.....	.....	.....	.....	.....	.....
Tea—								
1.—Foreign	.....	2,261	.....	1,635	2,261	1,635	626	.....
2.—Indian	.....	.....	.....	.....	.....	.....	.....	.....
Wood—								
1.—Timber	252	158	.....	.....	410	.....	410	.....
2.—Firewood	1,517	31	2,009	46	1,538	2,040	.....	451
Tobacco	96	1,430	53	632	1,532	685	847	.....
All other articles of merchandise—								
1.—Unmanufactured	2,675	1,099	1,843	1,185	4,374	3,098	1,346	.....
2.—Manufactured	416	.....	397	.....	416	397	19	.....
Hay, straw, and wooloo (C. & S.-E. Section)	.....	.....	.....	.....	.....	.....	.....	.....
Total	31,086	75,509	16,137	45,537	106,595	61,694	45,673	672

Excluding local traffic of the Northern Bengal, Kaunee-Dharla and Dacca Railways during 1886.

Comparative statement of the principal commodities carried over the Eastern Bengal State Railway during the month of November 1880.

INCREASES.		Tons.
Coal	.....	5,012
For railway and flotilla purposes principally.	.....	.....
Cotton piece-goods	.....	1,466
Despatches to North Bengal and Dacca.	.....	.....
Rice	.....	1,197
Good crops and a favourable market.	.....	.....
Grains	.....	8,323
Principally from D. K. Ghat and Goalundo. The season crops have been favourable.	.....	.....
Jute	.....	18,983
Principally from Goalundo, Narainganj and Surajganj.	.....	.....
Metals	.....	842
This figure includes manufactures of metals, such as cooking utensils, drinking vessels, &c., for domestic purposes.	.....	.....
Kerosine-oil	.....	401
Increasing demand for up-country consumption.	.....	.....
Railway plant, &c.	.....	4,181
For the Assam-Bihar section and repairs and renewals.	.....	.....
Tea	.....	626
Increased cultivation and favourable English market.	.....	.....
Timber	.....	410
For building purposes.	.....	.....
Tobacco	.....	847
From the northern section.	.....	.....
DECREASE.		Tons.
Firewood	.....	451
Insufficiency of stocks in Calcutta.	.....	.....

Calcutta, the 27th January 1888.

F. P. QUINLAN, Examiner of Accounts.

Bengal Central Railway.

Abstract of principal commodities carried over the Eastern Bengal State Railway during the month of November 1887, as compared with the same month of the previous year.

STAPLES.	1887.		1886		Total.		Increase.	Decrease.
	Up.	Down.	Up.	Down.	1887.	1886.		
	Tons.	Tons.	Tons.	Tons.	Tons.	Tons.		
Coal	1,124	...	351	1	1,124	352	772	...
Cotton, raw	8	4	3	1	12	4	8	...
Cotton twist and yarn—								
1.—European	...	...	...	...	...	...	...	...
2.—Indian	...	...	...	...	...	...	...	...
Cotton piece-goods—								
1.—European—								
a.—In bales and bundles	297	2	136	...	299	136	163	...
b.—In boxes	...	...	...	...	...	...	...	...
2.—Indian—								
a.—In bales and bundles	...	...	...	...	...	...	...	...
b.—In boxes	...	...	...	...	...	...	...	...
Grains—								
2.—Rice	3	351	5	169	334	114	220	...
3.—Others	34	290	78	16	324	91	230	...
Hides and skins—								
1.—Hides of cattle—								
a.—Dressed	...	...	...	...	...	...	...	...
b.—Undressed	...	...	...	...	...	...	...	...
2.—Skins of sheep, &c.—								
a.—Dressed	1	31	...	31	32	31	1	...
b.—Undressed	...	...	...	...	...	...	...	...
Jute—								
1.—Raw—								
a.—Screwed	...	...	...	34	...	34	...	34
b.—Unscrewed	...	3,169	1	605	3,169	605	2,563	...
2.—Gunny-bags and cloth	8	4	13	2	12	15	...	3
Metals—								
1.—Copper, unwrought	...	...	...	...	...	...	...	...
2.—Brass, unwrought	...	...	...	...	...	...	...	...
3.—Brass and copper, wrought	...	...	...	...	...	...	...	...
4.—Iron	192	25	20	9	220	29	191	...
5.—Tin	...	...	...	...	...	...	...	...
6.—Others	...	...	...	...	...	...	...	...
Oils—								
2.—Kerosine	66	...	...	...	66	...	66	...
3.—Others	80	...	97	...	80	97	...	17
Oilseeds—								
1.—Linseed	...	...	...	...	...	...	...	...
2.—Rape and mustard	...	...	...	...	...	...	...	...
3.—Til or gingelly	...	...	...	...	...	...	...	...
4.—Niger	192	21	175	...	213	175	38	...
5.—Castor	...	...	...	...	...	...	...	...
6.—Poppy	...	...	...	...	...	...	...	...
7.—Others	...	...	...	...	...	...	...	...
Provisions—								
2.—Betelnuts	2	771	1	688	773	689	84	...
3.—Others	28	106	17	19	134	39	98	...
Railway plant and rolling-stock	426	102	127	19	628	146	382	...
Salt	200	...	151	...	200	151	49	...
Sugar—								
1.—Drained	...	...	...	...	...	...	...	...
2.—Undrained	11	71	13	93	82	106	...	24
Wood—								
1.—Timber	...	...	...	...	...	...	...	...
2.—Firewood	21	10	18	9	31	27	4	...
Tobacco	27	29	32	12	56	44	12	...
All other articles of merchandise—								
1.—Unmanufactured	...	...	...	...	...	...	...	...
2.—Manufactured	488	234	184	153	722	337	385	...
Total	3,208	5,203	1,422	1,801	8,411	3,223	5,200	78

Comparative Statement of the principal commodities carried over the Bengal Central Railway during the month of November 1887.

INCREASES.							Tons.
Coal	...	...	...	...	...	...	772
For Railway and Pilotilla purposes.	...	...	...	...	...	...	...
Cotton piece-goods	...	...	...	...	...	...	163
For Jessore and Khulna.	...	...	...	...	...	...	...
Grains	...	...	...	...	...	...	450
Good crops in these districts.	...	...	...	...	...	...	...
Jute	...	...	...	...	...	...	2,563
From Singha and Khulna principally.	...	...	...	...	...	...	...
Metals	...	...	...	...	...	...	193
Includes manufactures of metal for domestic purposes, &c.	...	...	...	...	...	...	...
Railway plant	...	...	...	...	...	...	382
Repair and renewals.	...	...	...	...	...	...	...

DECREASES.

The decreases under all heads are trifling, aggregating 78 tons and call for no remark.

CALCUTTA, the 24th February 1888.

F. P. QUINLAN, Examiner of Accounts.

Nalhati State Railway.

Statement showing Increases and Decreases in tonnage of Staples carried over the Nalhati State Railway during the month of December 1887, as compared with the same month of the previous year.

STAPLES.	1886.		1887.		1886.	1887.	Increase.	Decrease.
	Up.	Down.	Up.	Down.	Total.	Total.		
	Tons.	Tons.	Tons.	Tons.	Tons.	Tons.	Tons.	Tons.
I.—Coal	690	...	393	...	690	393	...	297
II.—Cotton, raw	44	...	22	...	44	22	...	22
III.—Cotton twist and yarn—								
2.—Indian	1	...	1	...	1	1	...	...
IV.—Cotton piece-goods—								
1.—European	32	1	26	1	33	27	...	6
2.—Indian	...	1	...	...	1	...	...	1
V.—Drugs and chemicals—								
2.—Non intoxicating—								
b. Others	...	...	1	...	...	1	1	...
VI.—Dyes and tans—								
1.—Indigo	...	4	...	4	4	4	...	...
X.—Jute—								
1.—Raw	...	8	...	5	8	5	...	3
3.—Gunny-bags and cloths	37	4	59	2	41	61	20	...
VII.—Grains—								
1.—Wheat	...	...	...	1	...	1	1	...
2.—Rice	2	1,261	13	1,589	1,263	1,602	339	...
4.—Gram	...	...	...	2	...	2	2	...
5.—Others	23	7	...	45	30	45	15	...
VIII.—Hides and skins—								
1.—Hides of cattle—								
a.—Dressed	...	2	...	1	2	1	...	1
b.—Undressed	...	1	...	...	1	...	...	...
XI.—Lac—								
2.—Shell-lac	...	...	1	...	...	1	1	...
XII.—Leather, manufactured	5	...	5	...	5	5	...	...
XIII.—Liquors—								
1.—Beer	2	...	...	...	2	...	...	2
2.—Wines	2	...	...	...	2	...	...	2
XIV.—Metals—								
3.—Iron	4	...	2	...	4	2	...	2
6.—Others	5	1	9	7	6	16	10	...
XV.—Oils—								
1.—Castor	...	...	1	...	...	1	1	...
2.—Kerosine	3	...	3	...	3	3	...	...
3.—Others	...	...	3	...	...	3	3	...
XIX.—Provisions—								
1.—Cheese	9	...	3	...	9	3	...	6
2.—Dried fruits and nuts	3	...	1	...	3	1	...	2
3.—Others	55	1	75	...	56	75	19	...
XX.—Railway plant and rolling-stock	6	...	43	19	6	62	56	...
XI. Salt	22	...	22	...	22	22	...	...
XVI.—Oilseeds—								
2.—Mustard and rape	18	...	12	...	18	12	...	6
7.—Others	2	...	16	1	2	17	15	...
XXIII.—Silk, raw—								
2.—Indian	59	15	4	13	74	17	...	57
XXIV.—Silk piece-goods—								
2.—Indian	1	5	...	4	6	4	...	2
XXVII.—Stone and lime	...	...	1	...	...	1	1	...
XXVI.—Sugar—								
1.—Drained	15	...	12	...	15	12	...	3
2.—Undrained	9	...	19	...	9	19	10	...
XXX.—Tobacco	...	5	4	5	5	9	4	...
XXIX.—Timber	1	...	3	...	1	3	2	...
XVII.—Paper and paste and	1	...	2	...	1	2	1	...
XXXIII.—All other articles of merchandise	34	15	38	37	49	75	26	...
Total	1,085	1,331	794	1,739	2,476	2,530	527	413

INCREASE.

Tons.

Gunny bags and cloth	...	...	...	...	...	20
This increase is due to increased grain traffic.						
Grain—(2) Rice	...	...	...	...	...	339
The increase in this commodity is due to greater despatches from intermediate stations owing to good crops this year and greater demands.						
(5) Others	...	...	...	...	...	15
This increase is due to river communication between Azimgunge and Calcutta being stopped for want of sufficient water; the traffic for Jeagunge, &c., is carried by rail.						
Metals—(6) Others	...	...	...	...	...	10
The increase under this head is due to greater demands of bell-metal ware this year.						
Provisions—(3) Others	...	...	...	...	...	19
The river communication being stopped, the merchants of Azimgunge and Jeagunge bring potatoes by rail this year.						
Railway plant and Rolling-stock	...	...	...	...	...	56
This increase is due to greater quantity of railway materials carried this year.						
Oilseeds—(7) Others	...	...	...	...	...	15
The increase under this head is due to market rate for Bugra and Gooja seeds being fair.						
Sugar—(2) Undrained	...	...	...	...	...	10
This increase is due to greater demand.						

DECREASE.

Coal	...	...	...	...	...	297
This decrease is due to greater import during previous months.						
Cotton, raw	...	...	...	...	...	22
This decrease is due to dull market rate.						
Silk, raw	...	...	...	...	...	57
This decrease is due to tassar cocoons not having been brought this year.						

NALHATI, the 26th February 1888.

R. G. MOOKERJEE, Manager, Nalhati State Railway.

Weekly Return of Traffic Receipts on Indian Railways,

EAST INDIAN RAILWAY.

Approximate Return of Traffic for week ended 18th February 1888, on 1,513½ miles open.

	COACHING TRAFFIC.		MERCHANDISE AND MINERAL TRAFFIC.		Other earnings (estimated).	Total earnings.	TRAFFIC TRAIN-MILES RUN.		
	Number of passengers.	Coaching receipts.	Weight carried.	Receipts.			Coaching.	Merchandise.	Total.
		Rs. A. P.	Mds. S.	Rs. A. P.	Rs. A. P.	Rs. A. P.			
Total traffic for the week ...	266,876	3,00,533 12 0	28,84,160 10	6,89,427 1 0	22,408 12 0	10,12,369 9 0	66,438½	109,610½	176,057½
Or per mile of railway ...	...	198 8 7	...	455 7 1	14 12 10	668 12 6	...	...	...
For previous 6 weeks of half-year ...	1,623,458	19,33,890 6 0	1,67,81,317 20	40,22,703 2 9	1,21,969 14 0	60,81,512 6 0	397,714½	632,328	1,030,042½
Total for 7 weeks ...	1,890,314	22,34,423 2 0	1,96,65,426 30	47,12,130 3 9	1,47,578 10 0	70,93,881 15 0	464,152½	741,947½	1,206,100
COMPARISON.									
Total for corresponding week of previous year ...	290,315½	3,13,163 7 0	27,61,318 20	6,74,737 10 1	20,339 4 1	10,08,180 5 2	68,385	110,181	178,566
Per mile of railway corresponding week of previous year ...	...	206 10 8	...	445 5 11	13 6 10	665 7 5	...	...	...
Total to corresponding date of previous year ...	1,810,390½	20,63,131 9 8	1,85,07,644 30	47,39,572 13 4	1,32,886 8 8	69,35,590 15 8	479,982	774,856	1,254,838

Approximate Statement of gross receipts of the East Indian Railway, prepared in accordance with Public Works Department Circular No. XXI, Railway, dated 23rd July 1883.

RECEIPTS FOR WEEK ENDING 10TH FEBRUARY 1887.			RECEIPTS FOR WEEK ENDING 18TH FEBRUARY 1888.			TOTAL RECEIPTS FROM 1ST APRIL 1886 TO 10TH FEBRUARY 1887.			TOTAL RECEIPTS FROM 1ST APRIL 1887 TO 18TH FEBRUARY 1888.			Total increase in 1888.	Total decrease in 1888.
Mean mileage worked.	Receipts.	Per mile worked.	Mean mileage worked.	Receipts.	Per mile worked.	Mean mileage worked.	Total receipts.	Per mile worked per week.	Mean mileage worked.	Total receipts.	Per mile worked per week.		
	Rs.	Rs.		Rs.	Rs.		Rs.	Rs.		Rs.	Rs.		Rs.
1,513	10,08,180	665	1,513½	10,12,370	669	1,515	4,12,14,508	591	1,516½	4,05,66,586	581	...	6,47,922

PATNA-GYA STATE RAILWAY.

Approximate Return of Traffic for week ended 18th February 1888, on 57½ miles open.

	COACHING TRAFFIC.		MERCHANDISE AND MINERAL TRAFFIC.		Other earnings (estimated).	Total earnings.	TRAFFIC TRAIN-MILES RUN.		
	Number of passengers.	Coaching receipts.	Weight carried.	Receipts.			Coaching.	Merchandise.	Total.
		Rs. A. P.	Mds. S.	Rs. A. P.	Rs. A. P.	Rs. A. P.			
Total traffic for the week ...	13,340	6,916 12 0	35,725 10	2,318 14 0	49 9 0	9,315 3 0	1,829	565	2,394
Or per mile of railway ...	233	121 7 2	624 39	40 8 8	0 13 10	162 13 8	...	...	...
For previous 6 weeks of half-year ...	80,454	44,707 2 0	2,91,840 30	12,822 2 0	203 7 0	57,732 11 0	10,993	3,599	14,592
Total for 7 weeks ...	93,794	51,623 14 0	2,90,566 0	15,141 0 0	253 0 0	67,047 14 0	12,822	4,164	16,986
COMPARISON.									
Total for corresponding week of previous year ...	14,36½	7,882 2 9	44,034 0	2,849 13 0	105 3 9	10,828 3 6	1,739	605	2,344
Per mile of railway corresponding week of previous year ...	251	137 12 10	770 0	49 10 7	1 13 5	189 4 10	...	...	...
Total to corresponding date of previous year ...	92,54½	49,470 7 10	5,31,401 0	21,778 2 0	415 8 3	71,061 2 1	12,348	5,633	17,981

Approximate Statement of gross receipts of the Patna-Gya State Railway, prepared in accordance with Public Works Department Circular No. XXI, Railway, dated 23rd July 1883.

RECEIPTS FOR WEEK ENDING 10TH FEBRUARY 1887.			RECEIPTS FOR WEEK ENDING 18TH FEBRUARY 1888.			TOTAL RECEIPTS FROM 1ST APRIL 1886 TO 10TH FEBRUARY 1887.			TOTAL RECEIPTS FROM 1ST APRIL 1887 TO 18TH FEBRUARY 1888.			Total increase in 1888.	Total decrease in 1888.
Mean mileage worked.	Receipts.	Per mile worked.	Mean mileage worked.	Receipts.	Per mile worked.	Mean mileage worked.	Total receipts.	Per mile worked per week.	Mean mileage worked.	Total receipts.	Per mile worked per week.		
	Rs.	Rs.		Rs.	Rs.		Rs.	Rs.		Rs.	Rs.		Rs.
57½	10,828	189	57½	9,315	163	57½	4,74,261	180	57½	4,46,096	170	...	26,168

DILDARNAGAR-GHAZIPUR STATE RAILWAY.

Approximate Return of Traffic for week ended 18th February 1888, on 12 miles open.

	COACHING TRAFFIC.		MERCHANDISE AND MINERAL TRAFFIC.		Other earnings (estimated).	Total earnings.	TRAFFIC TRAIN-MILES RUN.		
	Number of passengers.	Receipts.	Weight carried.	Receipts.			Coaching.	Merchandise.	Total.
		Rs. A. P.	Mds. S.	Rs. A. P.	Rs. A. P.	Rs. A. P.			
Total traffic for the week ...	2,255	436 15 0	16,388 20	346 4 0	9 5 0	782 8 0	333½	160	493½
Or per mile of railway ...	.....	36 6 7	.....	29 0 4	0 12 5	65 3 4	.....	.....	.....
For previous 6 weeks of half-year ...	10,298	3,263 11 0	1,38,129 0	2,571 13 0	63 6 0	5,898 14 0	2,040	981	2,991
Total for 7 weeks ...	21,553	3,700 10 0	1,56,517 20	2,908 1 0	72 11 0	6,681 6 0	2,373½	1,081	3,454½
COMPARISON.									
Total for corresponding week of previous year ...	3,230	510 5 8	23,063 30	601 14 0	6 14 0	1,149 1 8	360	133	493
Per mile of railway corresponding week of previous year ...	.....	45 0 6	.....	50 2 6	0 9 2	95 12 2	.....	.....	.....
Total to corresponding date of previous year ...	21,109½	3,535 6 5	1,50,454 30	3,707 10 0	37 4 3	7,280 4 8	2,424	1,088	3,522

Approximate Statement of gross receipts of the Dildarnagar-Ghazipur State Railway, prepared in accordance with Public Works Department Circular No. XXI, Railway, dated 23rd July 1883.

RECEIPTS FOR WEEK ENDING 19TH FEBRUARY 1887.			RECEIPTS FOR WEEK ENDING 18TH FEBRUARY 1888.			TOTAL RECEIPTS FROM 1ST APRIL 1886 TO 19TH FEBRUARY 1887.			TOTAL RECEIPTS FROM 1ST APRIL 1887 TO 18TH FEBRUARY 1888.			Total increase in 1888.	Total decrease in 1888.
Mean mileage worked.	Receipts.	Per mile worked.	Mean mileage worked.	Receipts.	Per mile worked.	Mean mileage worked.	Total receipts.	Per mile worked per week.	Mean mileage worked.	Total receipts.	Per mile worked per week.		
	Rs.	Rs.		Rs.	Rs.		Rs.	Rs.		Rs.	Rs.	Rs.	
12	1,149	96	12	783	65	12	42,420	77	12	42,209	77	.....	211

SINDIA STATE RAILWAY.

Approximate Return of Traffic for week ended 18th February 1888, on 74½ miles open.

	COACHING TRAFFIC.		MERCHANDISE AND MINERAL TRAFFIC.		Other earnings (estimated).	Total earnings.	TRAFFIC TRAIN-MILES RUN.		
	Number of passengers.	Receipts.	Weight carried.	Receipts.			Coaching.	Merchandise.	Total.
		Rs. A. P.	Mds. S.	Rs. A. P.	Rs. A. P.	Rs. A. P.			
Total traffic for the week ...	5,817	4,297 0 0	85,368 20	3,906 4 0	104 9 0	8,307 13 0	650	1,315½	1,095½
Or per mile of railway ...	.....	57 7 2	.....	52 3 7	1 6 4	111 1 1	.....	.....	.....
For previous 6 weeks of half-year ...	27,821	20,980 14 0	5,29,095 20	26,772 3 0	659 13 0	48,398 14 0	3,951½	7,617½	13,671½
Total for 7 weeks ...	33,638	25,263 14 0	6,14,464 0	30,678 7 0	764 6 0	56,706 11 0	4,602½	10,966½	15,571½
COMPARISON.									
Total for corresponding week of previous year ...	6,321½	5,079 9 4	96,521 10	4,611 15 0	136 12 9	9,823 5 1	824	1,130	1,034
Per mile of railway corresponding week of previous year ...	.....	67 13 3	.....	61 10 6	1 13 3	131 5 0	.....	.....	.....
Total to corresponding date of previous year ...	40,654½	30,732 11 5	7,61,355 10	39,122 14 0	684 13 3	70,540 6 8	5,444	8,885	14,516

Approximate Statement of gross receipts of the Sindia State Railway, prepared in accordance with Public Works Department Circular No. XXI, Railway, dated 23rd July 1883.

RECEIPTS FOR WEEK ENDING 19TH FEBRUARY 1887.			RECEIPTS FOR WEEK ENDING 18TH FEBRUARY 1888.			TOTAL RECEIPTS FROM 1ST APRIL 1886 TO 19TH FEBRUARY 1887.			TOTAL RECEIPTS FROM 1ST APRIL 1887 TO 18TH FEBRUARY 1888.			Total increase in 1888.	Total decrease in 1888.
Mean mileage worked.	Receipts.	Per mile worked.	Mean mileage worked.	Receipts.	Per mile worked.	Mean mileage worked.	Total receipts.	Per mile worked per week.	Mean mileage worked.	Total receipts.	Per mile worked per week.		
	Rs.	Rs.		Rs.	Rs.		Rs.	Rs.		Rs.	Rs.	Rs.	
74½	8,822	181	74½	3,308	111	74½	8,56,334	103	74½	3,01,313	114	85,979	.....

TARKESSUR BRANCH RAILWAY.

Approximate Return of Traffic for week ended 18th February 1888, on 22½ miles open.

	COACHING TRAFFIC.		MERCHANDISE AND MINERAL TRAFFIC.		Other earnings (estimated).	Total earnings.	TRAFFIC TRAIN-MILES RUN.		
	Number of passengers.	Receipts.	Weight carried.	Receipts.			Coaching.	Merchandise.	Total.
		Rs. A. P.	MDS. S.	Rs. A. P.	Rs. A. P.	Rs. A. P.			
Total traffic for the week	18,858	4,767 10 0	11,027 30	351 2 0	4 11 0	5,123 7 0	875	93	968
Or per mile of railway	.....	214 4 5	.....	15 12 6	0 3 4	230 4 3	.....	.....	.....
For previous 6 weeks of half-year	1,26,931	32,719 5 0	46,609 10	1,526 15 0	35 14 0	34,322 3 0	5,481	459	5,940
Total for 7 weeks	1,45,789	37,486 15 0	57,637 0	1,918 1 0	40 0 0	34,445 9 0	6,356	552	6,908
COMPARISON.									
Total for corresponding week of previous year	19,984	4,906 15 3	9,042 10	164 11 0	5 11 0	5,077 5 3	1,950	40	1,100
Per mile of railway corresponding week of previous year	.....	220 8 7	.....	7 6 5	0 4 1	228 3 1	.....	.....	.....
Total to corresponding date of previous year	1,31,874	33,280 4 6	53,551 20	1,690 1 0	42 13 6	35,019 3 0	6,893	303	7,196

Approximate Statement of gross receipts of the Tarkeessur Branch Railway, prepared in accordance with Public Works Department Circular No. XXI. Railway, dated 23rd July 1883.

RECEIPTS FOR WEEK ENDING 19TH FEBRUARY 1887.			RECEIPTS FOR WEEK ENDING 15TH FEBRUARY 1888.			TOTAL RECEIPTS FROM 1ST APRIL 1886 TO 12TH FEBRUARY 1887.			TOTAL RECEIPTS FROM 1ST APRIL 1887 TO 15TH FEBRUARY 1888.			Total increase in 1888.	Total decrease in 1888.
Mean mileage worked.	Receipts.	Per mile worked.	Mean mileage worked.	Receipts.	Per mile worked.	Mean mileage worked.	Total receipts.	Per mile worked per week.	Mean mileage worked.	Total receipts.	Per mile worked per week.	Rs.	
Rs.	Rs.		Rs.	Rs.		Rs.	Rs.		Rs.	Rs.		Rs.	
22½	5,077	228	22½	5,123	230	22½	2,11,721	207	22½	2,32,633	227	20,912	.....

EASTERN BENGAL STATE RAILWAY.

(INCLUDING N. B. DACCA, K. AND D., AND ASSAM-BEHAR SECTIONS).

Approximate Return of Traffic for week ended 11th February 1888, on 645 miles open.

	COACHING TRAFFIC.		MERCHANDISE AND MINERAL TRAFFIC.		Other earnings (estimated), including Steam-boat.	Total earnings.	TRAFFIC TRAIN-MILES RUN.		
	Number of passengers.	Coaching receipts.	Weight carried.	Receipts.			Coaching.	Merchandise.	Total.
		Rs. A. P.	MDS. S.	Rs. A. P.	Rs. A. P.	Rs. A. P.			
Total traffic for the week	115,727	69,387 0 0	5,08,968 0	93,053 0 0	14,507 0 0	1,76,947 0 0	22,592	21,915	44,507
Or per mile of railway	179	108 0 0	789 0	144 0 0	4 0 0*	256 0 0	.....	.....	.....
For previous 6 weeks of half-year	627,940	3,40,875 0 0	26,77,353 0	5,01,890 0 0	72,360 0 0	9,27,071 0 0	108,472	110,788	219,260
Total for 6 weeks	743,667	4,19,262 0 0	31,86,301 0	5,97,949 0 0	86,907 0 0	11,04,018 0 0	131,064	1,32,703	263,767
COMPARISON.									
Total for corresponding week of previous year	134,843	70,533 0 0	5,72,156 0	1,04,658 0 0	14,485 0 0	1,89,706 0 0	19,477	23,173	42,650
Per mile of railway corresponding period of previous year	223	116 0 0	944 0	173 0 0	4 0 0*	293 0 0	.....	.....	.....
Total to corresponding date of previous year	817,628	3,84,844 0 0	33,62,453 0	5,47,669 0 0	76,986 0 0	10,08,590 0 0	119,214	132,928	252,142

* Excluding steamers' earnings.

FINANCIAL YEAR.

Approximate Statement of gross receipts of the Eastern Bengal State Railway.

RECEIPTS FOR WEEK ENDING 12TH FEBRUARY 1887.			RECEIPTS FOR WEEK ENDING 11TH FEBRUARY 1888.			TOTAL RECEIPTS FROM 1ST APRIL 1886 TO 12TH FEBRUARY 1887.			TOTAL RECEIPTS FROM 1ST APRIL 1887 TO 11TH FEBRUARY 1888.			Total increase in 1887-88.	Total decrease in 1887-88.
Mean mileage worked.	Receipts.	Per mile worked.	Mean mileage worked.	Receipts.	Per mile worked.	Mean mileage worked.	Total receipts.	Per mile worked per week.	Mean mileage worked.	Total receipts.	Per mile worked per week.	Rs.	
Rs.	Rs.		Rs.	Rs.		Rs.	Rs.		Rs.	Rs.		Rs.	
606	1,89,706	313	645	1,76,947	274	606	73,13,680	268	645	83,92,493†	289	10,78,814	.....

† Audited up to 24th December 1887.

BENGAL CENTRAL RAILWAY.

Approximate Return of Traffic for week ended 11th February 1888, on 125 miles open.

	COACHING TRAFFIC.		MERCHANDISE AND MINERAL TRAFFIC.		Other earnings (estimated).	Total earnings.	TRAFFIC TRAIN-MILES RUN.		
	Number of passengers.	Coaching receipts.	Weight carried.	Receipts.			Coaching.	Merchandise.	Total.
		Rs. A. P.	Mds. S.	Rs. A. P.	Rs. A. P.	Rs. A. P.			
Total traffic for the week ...	21,818	8,953 0 0	48,319 0	4,456 0 0	60 0 0	13,449 0 0	5,501	1,709	6,210
Or per mile of railway ...	175	71 0 0	387 0	36 0 0	1 0 0	108 0 0	...	...	...
For previous 5 weeks of half-year ...	110,008	43,054 0 0	2,18,552 0	20,391 0 0	270 0 0	63,755 0 0	17,503	8,557	26,060
Total for 6 weeks ...	141,726	52,027 0 0	2,66,871 0	24,847 0 0	340 0 0	77,204 0 0	21,004	10,266	31,270
COMPARISON.									
Total for corresponding week of previous year ...	26,164	10,729 0 0	28,576 0	2,046 0 0	57 0 0	12,832 0 0	3,480	1,730	5,210
Per mile of railway corresponding period of previous year ...	209	86 0 0	229 0	16 0 0	1 0 0	103 0 0	...	...	...
Total to corresponding date of previous year ...	140,160	52,750 0 0	1,60,280 0	10,126 0 0	238 0 0	63,174 0 0	22,294	9,736	32,030

FINANCIAL YEAR.

Approximate Statement of gross receipts of the Bengal Central Railway.

RECEIPTS FOR WEEK ENDING 12TH FEBRUARY 1887.			RECEIPTS FOR WEEK ENDING 11TH FEBRUARY 1888.			TOTAL RECEIPTS FROM 1ST APRIL 1886 TO 12TH FEBRUARY 1887.			TOTAL RECEIPTS FROM 1ST APRIL 1887 TO 11TH FEBRUARY 1888.			Total increase in 1887-88.	Total decrease in 1887-88.
Mean mileage worked.	Receipts.	Per mile worked.	Mean mileage worked.	Receipts.	Per mile worked.	Mean mileage worked.	Total receipts.	Per mile worked per week.	Mean mileage worked.	Total receipts.	Per mile worked per week.	Rs.	
125	Rs. 12,832	Rs. 103	125	Rs. 13,449	Rs. 108	125	Rs. 4,92,164	Rs. 87	125	Rs. 5,72,437*	Rs. 102	Rs. 80,273	.....

* Audited up to week ending 24th December 1887.

DACCA STATE RAILWAY.

Approximate Return of Traffic for week ended 11th February 1888, on 86 miles open.

	COACHING TRAFFIC.		MERCHANDISE AND MINERAL TRAFFIC.		Other earnings (estimated).	Total earnings.	TRAFFIC TRAIN-MILES RUN.		
	Number of passengers.	Coaching receipts.	Weight carried.	Receipts.			Coaching.	Merchandise.	Total.
		Rs. A. P.	Mds. S.	Rs. A. P.	Rs. A. P.	Rs. A. P.			
Total traffic for the week ...	12,017	5,121 0 0	12,742 0	1,148 0 0	40 0 0	6,309 0 0	2,129	975	3,104
Or per mile of railway ...	150	60 0 0	148 0	13 0 0	...	73 0 0	...	...	...
For previous 5 weeks of half-year ...	69,427	27,055 0 0	1,46,235 0	9,333 0 0	250 0 0	36,644 0 0	10,100	5,054	14,820
Total for 6 weeks ...	82,344	32,176 0 0	1,18,977 0	10,481 0 0	290 0 0	42,953 0 0	12,295	5,029	17,324
COMPARISON.									
Total for corresponding week of previous year ...	12,287	4,379 0 0	21,766 0	2,361 0 0	62 0 0	6,802 0 0	1,868	1,606	3,532
Per mile of railway corresponding period of previous year ...	143	51 0 0	253 0	27 0 0	1 0 0	79 0 0	...	...	...
Total to corresponding date of previous year ...	75,825	27,404 0 0	1,33,761 0	12,586 0 0	1,094 0 0	41,084 0 0	12,799	8,011	21,410

FINANCIAL YEAR.

Approximate Statement of gross receipts of the Dacca State Railway.

RECEIPTS FOR WEEK ENDING 12TH FEBRUARY 1887.			RECEIPTS FOR WEEK ENDING 11TH FEBRUARY 1888.			TOTAL RECEIPTS FROM 1ST APRIL 1886 TO 12TH FEBRUARY 1887.			TOTAL RECEIPTS FROM 1ST APRIL 1887 TO 11TH FEBRUARY 1888.			Total increase in 1887-88.	Total decrease in 1887-88.
Mean mileage worked.	Receipts.	Per mile worked.	Mean mileage worked.	Receipts.	Per mile worked.	Mean mileage worked.	Total receipts.	Per mile worked per week.	Mean mileage worked.	Total receipts.	Per mile worked per week.	Rs.	
86	Rs. 4,804	Rs. 79	86	Rs. 5,309	Rs. 73	86	Rs. 2,36,397	Rs. 61	86	Rs. 2,08,719†	Rs. 60	Rs. 32,323	.....

† Audited up to week ending 24th December 1887.

ASSAM-BEHAR STATE RAILWAY.

(PURNEAH SECTION.)

Approximate Return of Traffic for week ended 11th February 1888, on 39 miles open.

	COACHING TRAFFIC.		MERCHANDISE AND MINERAL TRAFFIC.		Other earnings (estimated).	Total earnings.	TRAFFIC TRAIN-MILES RUN.		
	Number of passengers.	Coaching receipts.	Weight carried.	Receipts.			Coaching.	Merchandise.	Total.
		RS. A. P.	MDs. S.	RS. A. P.	RS. A. P.	RS. A. P.			
Total traffic for the week ...	2,707	974 0 0	19,823 0	1,937 0 0	10 0 0	2,911 0 0	546	546	1,092
Or per mile of railway ...	69	25 0 0	5 8 0	50 0 0	...	75 0 0	.....	.....	.....
For previous 4 weeks of half-year ...	15,934	5,800 0 0	84,891 0	7,972 0 0	75 0 0	13,817 0 0	2,750	2,750	5,500
Total for 6 weeks ...	18,641	6,774 0 0	1,04,714 0	9,929 0 0	85 0 0	16,788 0 0	3,276	3,276	6,592
COMPARISON.									
Total for corresponding week of previous year ...	.....	.....	.....	.....	.....	.....	.....	.....	.....
Per mile of railway corresponding period of previous year ...	.....	...	...	...	...	.....	.....	...	.....
Total to corresponding date of previous year ...	.....	.....	.....	.....	.....	.....	.....	.....	.....

FINANCIAL YEAR.

Approximate Statement of gross receipts of the Assam Behar State Railway.

RECEIPTS FOR WEEK ENDING 12TH FEBRUARY 1887.				RECEIPTS FOR WEEK ENDING 11TH FEBRUARY 1888.				TOTAL RECEIPTS FROM 1ST APRIL 1886 TO 12TH FEBRUARY 1887.				TOTAL RECEIPTS FROM 1ST APRIL 1887 TO 11TH FEBRUARY 1888.				Total increase in 1887-88.	Total decrease in 1887-88.
Mean mileage worked.	Receipts.	Per mile worked.	Mean mileage worked.	Receipts.	Per mile worked.	Mean mileage worked.	Total receipts.	Per mile worked.	Mean mileage worked.	Total receipts.	Per mile worked.	Mean mileage worked.	Total receipts.	Per mile worked.	Mean mileage worked.	Rs.	Total decrease in 1887-88.
...	39	2,941	75	...	...	...	39	1,04,051*	60	...	...	...	...	1,04,051	...

* Audited up to week ending 20th December 1887.

NALHATI STATE RAILWAY.

Approximate Return of Traffic for the week ending 18th February 1888, on 27½ miles open.

	COACHING TRAFFIC.		MERCHANDISE AND MINERAL TRAFFIC.		Other earnings (estimated).	Total earnings.	TRAFFIC TRAIN-MILES RUN.		
	Number of passengers.	Coaching receipts.	Weight carried.	Receipts.			Coaching.	Merchandise.	Total.
		RS. A. P.	MDs. S.	RS. A. P.	RS. A. P.	RS. A. P.			
Total traffic for the week ..	3,561½	1,340 8 6	16,281 0	839 9 0	24 6 0	2,204 7 6	509	254	763
Or per mile of railway ..	131	49 3 0	597 0	30 13 0	0 14 0	80 14 0	.....	.....	.....
For previous 6 weeks of half-year ..	19,152½	6,963 7 3	1,15,041 0	5,366 7 0	105 10 0	12,435 8 6	3,054	2,771½	5,825½
Total for 7 weeks ..	22,714	8,304 0 0	1,31,322 0	6,206 0 0	130 0 0	14,640 0 0	3,563	3,025½	6,588½
COMPARISON.									
Total for corresponding week of previous year ..	3,307	1,352 3 3	15,112 0	869 12 0	7 0 0	2,228 15 3	509	387½	896½
Per mile of railway corresponding week of previous year ..	121	49 10 0	555 0	31 15 0	0 4 0	81 13 0	.....	.....	.....
Total to corresponding date of previous year ..	20,777	7,818 12 7	1,01,518 30	5,459 12 0	175 2 6	13,453 11 1	3,635	2,362½	5,997½

FINANCIAL YEAR.

Approximate Statement of gross receipts of the Nalhati State Railway.

RECEIPTS FOR WEEK ENDING 19TH FEBRUARY 1887.				RECEIPTS FOR WEEK ENDING 18TH FEBRUARY 1888.				TOTAL RECEIPTS FROM 1ST APRIL 1886 TO 19TH FEBRUARY 1887.				TOTAL RECEIPTS FROM 1ST APRIL 1887 TO 18TH FEBRUARY 1888.				Total increase in 1887-88.	Total decrease in 1887-88.
Mean mileage worked.	Receipts.	Per mile worked.	Mean mileage worked.	Receipts.	Per mile worked.	Mean mileage worked.	Total receipts.	Per mile worked.	Mean mileage worked.	Total receipts.	Per mile worked.	Mean mileage worked.	Total receipts.	Per mile worked.	Mean mileage worked.	Rs.	Total decrease in 1887-88.
...	27½	2,220	81	27½	75,905	61	27½	82,786	68	...	...	...	...	6,881	...

TIRHOOT STATE RAILWAY.

Approximate Return of Traffic for the week ending 18th February 1888, on 259 miles open.

	COACHING TRAFFIC.		MERCHANDISE AND MINERAL TRAFFIC.		Other earnings (estimated).	Total earnings.	TRAFFIC TRAIN-MILES RUN.		
	Number of passengers.	Coaching receipts.	Weight carried.	Receipts.			Coaching.	Merchandise.	Total.
		Rs. A. P.	Mds. S.	Rs. A. P.	Rs. A. P.	Rs. A. P.			
Total traffic for the week on 259 miles open	41,669	15,135 2 1	2,49,442 20	23,498 9 0	4,414 12 3	47,049 7 1	6,121	9,540	15,661
Or per mile of railway	161	58 7 0	964 0	90 12 0	3 2 0	182 5 0*	.....	.....	.....
for previous 6 weeks of half-year	259,983	1,02,740 13 11	11,67,320 24	1,10,781 7 0	23,643 3 9	2,16,165 8 8	41,284	40,218	90,532
Total for 7 weeks	301,652	1,17,877 0 0	14,16,763 0	1,43,280 0 0	28,058 0 0	2,43,215 0 0	47,405	58,788	1,06,193
COMPARISON.									
Total for corresponding week of previous year on 246 miles open	38,710	16,745 11 5	1,76,689 10	17,046 10 0	4,554 5 8	38,346 11 1	5,985	5,253	11,238
Or per mile of railway corresponding week of previous year	157	68 1 0	718 0	69 5 0	7 13 0	155 3 0*	.....	.....	.....
Total to corresponding date of previous year	276,204	1,12,910 4 1	10,61,078 10	1,03,593 4 0	21,542 12 5	2,38,636 4 6	40,410	55,686	76,026

* Steam-boat earnings excluded in calculating "Total earnings per mile of Railway."

FINANCIAL YEAR.

Approximate Statement of gross receipts of the Tirhoot State Railway.

RECEIPTS FOR WEEK ENDING 19TH FEBRUARY 1887.				RECEIPTS FOR WEEK ENDING 18TH FEBRUARY 1888.				TOTAL RECEIPTS FROM 1ST APRIL 1886 TO 19TH FEBRUARY 1887.				TOTAL RECEIPTS FROM 1ST APRIL 1887 TO 18TH FEBRUARY 1888.				Total increase or decrease 1887-88.	Total decrease or increase 1887-88.
Miles open.	Receipts.	Per mile worked.	Mean mileage worked.	Miles open.	Receipts.	Per mile worked.	Mean mileage worked.	Miles open.	Total receipts.	Per mile worked.	Mean mileage worked.	Miles open.	Total receipts.	Per mile worked.	Mean mileage worked.	Rs.	
246	Rs. 38,347	Rs. 156	259	259	Rs. 43,049	Rs. 166	246	246	Rs. 14,06,775	Rs. 124	251.74	259	Rs. 15,93,879	Rs. 138	251.74	Rs. 1,87,104	.....

DARJEELING-HIMALAYAN RAILWAY COMPANY, LIMITED.

Rs.

Approximate earnings for week ending 11th February 1888	...	...	6,552
Corresponding week last year	...	...	6,893
Decrease	...	...	341
Receipts from 1st January to 11th February 1888	...	...	35,917
From 1st January to 12th February 1887	...	...	33,069
Increase	...	...	2,848
Miles open, week ending 11th February 1888	...	...	Miles. 61
Corresponding week last year	...	...	51
Receipts per mile open, week ending 11th February 1888	...	...	Rs. A. P. 128 7 6
Corresponding week last year	...	...	135 2 7
Decrease	...	...	6 11 1

DARJEELING, the 20th February 1888.

H. BRICH, Acting Secretary, D. H. Ry.



SUPPLEMENT TO The Calcutta Gazette.

WEDNESDAY, MARCH 7, 1888.

OFFICIAL PAPERS.

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Abstract of the Proceedings of the Council of the Lieutenant-Governor of Bengal, assembled for the purpose of making Laws and Regulations under the provisions of the Act of Parliament 24 and 25 Vic., Cap. 67.

The Council met at the Council Chamber on Saturday, the 18th February, 1888, at 11 A.M.

Present:

The HON. SIR STEUART COLVIN BAYLEY, K.C.S.I., C.I.E., Lieutenant-Governor of Bengal, *presiding*.
 The HON. G. C. PAUL, C.I.E., Advocate-General of Bengal.
 The HON. H. J. REYNOLDS, C.S.I.
 The HON. C. P. L. MACAULAY, C.I.E.
 The HON. T. T. ALLEN.
 The HON. SIR HENRY HARRISON, K.T.
 The HON. SIR ALFRED CROFT, K.C.I.E.
 The HON. MOULVIE ABDUL JUBBAR.
 The HON. G. IRVING.
 The HON. BABU KALI NATH MITTER.
 The HON. DR. MAHENDRA LAL SIRCAR, C.I.E.
 The HON. C. H. MOORE.
 The HON. DR. GOOROO DAS BANERJEE.

CALCUTTA AND SUBURBAN MUNICIPALITIES AMALGAMATION BILL.

THE HON. SIR HENRY HARRISON moved that the clauses of Chapter II, Part I, of the Bill to consolidate and amend the law relating to the municipal affairs of the Town and Suburbs of Calcutta be further considered for settlement in the form recommended by the Select Committee.

The motion was put to the vote and carried.

THE HON. DR. GOOROO DAS BANERJEE moved that in line 3 of section 19, after the words "year 1888-89" the words "on some day, being a public holiday" be inserted. He said:—The object of this amendment is shortly this. The Bill requires that votes at all elections shall be given personally at the polling stations. That being so, unless the elections are held on a public holiday, it will place at a disadvantage a certain large and important class of voters—I mean the educated middle classes, whose occupation is for the most part service. Voters of this class always exercise their privilege of voting with honest independence and discrimination, and they contribute in no small measure to raising the tone of the elections and to the success of the elective system. It is but right, therefore, that their case should deserve some consideration, and the difficulty would be sufficiently met by holding the elections on some public holiday. There are no less than three public holidays about the time that these elections would be held, viz., New Year's Day, Sri Panchami, and Dole Jatra, and any one of these might be selected; or a special holiday might be given for the purpose.

HIS HONOUR THE PRESIDENT said:—I see no objection in substance to the motion before the Council, but I should like to know the effect of giving a special holiday. Would that necessarily mean that the Public Treasury and Banks would be closed, or merely public offices? If it is not intended to be a public holiday under the Negotiable Instruments Act, I have no objection.

THE HON. MR. MACAULAY said:—The hon. member forgets that, when the elections under the Bengal Municipalities Act were held, all public offices and courts under the control of the Local Government were closed by executive order. No public holiday was, however, declared under the Negotiable Instruments Act, as the effect would have been to stop the currency of bills of exchange.

THE HON. DR. GOOROO DAS BANERJEE said:—I have no objection to withdraw the amendment, as I understand that a public holiday in its more limited sense will be granted as far as the Local Government is concerned.

The motion was accordingly by leave withdrawn.

THE HON. DR. GOOROO DAS BANERJEE moved that from the first paragraph of section 19 the portion beginning with the words "until such election shall take effect" to the end of the paragraph be omitted. He said:—The object I had in view when I gave notice of this amendment was to make this section of the Bill consistent with the other provisions of the Bill in the event of the first amendment, of which I gave notice, viz., that no portion of the Suburbs be amalgamated with the Town, being carried. From that point of view this amendment has no object now: but it serves another purpose, and that is this. If this portion of section 19 is left out, some other provision would have to be made for the carrying on of the work of the Corporation between the time of the passing of this Bill into law and the time when the first elections pursuant to its provisions take place. As the provision stands, it authorises the Commissioners, who are in office at the date of the passing of this Bill into law, to continue in office and to carry on municipal work until the new elections take effect. But there are inconveniences in this, one of which I shall notice. Certain portions of the Suburbs will be amalgamated with the Town. These portions have their elected Commissioners, some of whom may reside within the limits of the new Town, others may not. The section says that "this Act shall be read as if the Commissioners elected for those parts of the Suburbs of Calcutta which correspond with Wards 19, 20, 21, 22, 23, 24 and 25, as defined in this Act, and the Commissioners for the Suburbs of Calcutta nominated by Government and resident in Calcutta, were duly

appointed and elected under this Act." So that some of the Commissioners for the Suburbs would be in office, while others would not be in office by reason of not being resident within the limits of the new Town. That is an inconvenience which would be avoided by omitting this portion of the section.

The Hon. SIR HENRY HARRISON said :—The amendment of the hon. member is one which raises a point of considerable importance, and one which deserves the best consideration of the Council, because it will closely affect the working of the new Corporation in its initial stage. When section 19 was originally drafted, the hope was entertained that the Act might come into force from the beginning of the next year; and it was deliberately intended that the old Commissioners should work for nearly a year before the new elections took place in order that the difficulties of adjusting the new arrangements might fall into experienced hands, and it was with that object the last portion of this section was framed. But in the meantime the date of the Act coming into force has been thrown back a whole year. This provision of the Bill assumes that the Act would be in force considerably before 31st March. Therefore the question is, do the Council wish to have the new Corporation elected before the Act comes into force, or the Act to come into force first and to be worked for some time by the old body of Commissioners? There are some inconveniences in both proposals: but I think the inconveniences of working with the old body predominate. I do not anticipate any great difficulty from the number of the Commissioners, but there may be considerable difficulty in working Committees, especially the Town Council. This body now consists of 30 Commissioners, being one Commissioner for each ward and a due proportion of nominated Commissioners. The Commissioners who might be then members of the Town Council would naturally wish to remain in it, and it would be difficult to reduce it below that number. Then again representation must be given to the Suburban Commissioners, and it would be difficult to resist the pressure of individual members to have a Town Council of something like 40 Commissioners, and that would be a very formidable Committee indeed; so that probably there would be some inconvenience in working the Corporation with the joint bodies. The inconvenience arising from the other procedure is, I think, on the whole not so serious. It is mainly this, that we should have to conduct the elections from the Town without having that control over all the registers and statistics which a certain period of working would give us. I have very little doubt that the Suburban Commissioners will give us sufficient assistance as far as the owners and occupiers are concerned who are qualified to vote, and with regard to those who hold licenses we ourselves have the requisite information. But there is one class of electors who will not be able to vote at the first elections in that case, viz., those who pay Rs. 24 in the year, for the reason that the voters who will be able to obtain that qualification are chiefly the lower grades of the trades and professions tax payers who will not be in existence in the Suburbs; and therefore a certain appreciable number of residents in the Suburbs, who would have got a vote if the Act had been in force for a year, will not be able to vote at the first elections, and consequently it may be made a matter of complaint that the constituency which elects the first body of Suburban Commissioners will be somewhat smaller than if the Act had been in force for a year. It is just possible that not having the same familiarity with the Suburban as with the Town wards our machinery will not work as smoothly as regards the Suburban elections as I hope it will with regard to the Town. I beg the Council to consider which of these two alternatives they prefer. If they prefer that the Commissioners should be elected before the new Act is worked, then they should adopt the amendment. In that case nothing more will be needed than in the first section of the Bill to enact that sections 7—34 of the Bill are for the purposes of the election to come into force on a date either to be fixed in the Act or on a date to be fixed by the Local Government, and that the rest of the Act shall come into operation on some other date specified. There will be no difficulty if the Council will declare whether they prefer that the Act should be worked by the joint body as was intended when the Bill was framed, or whether they prefer that the elections shall take place before the Act comes into force. That is the point which the Council has to decide in making up its mind on this amendment.

HIS HONOUR THE PRESIDENT said:—My own idea would be that for the convenience of working it will be better to fix by law, or to allow the Local Government to fix by notification, that from the beginning of the official year next following this the new Municipal Act is to come into force, and to go through the first elections within three months previously to that time. That would be in January or February next. I think the difficulty which the hon. mover of the amendment has pointed out is a real one, and I know not what further difficulties might crop up if the Act is to come into force now, but to be worked by the Town Corporation jointly with the Commissioners of the portions of the Suburbs which will be amalgamated, and with two separate establishments. This is merely my own idea, and I do not do more than ask the Council to consider it. The question is which of the two proposals the Council prefers. I shall be glad to accept whichever procedure is preferred.

THE HON. BABU KALI NATH MITTER said:—As far as my experience goes, I think it will be better to accept the suggestion of His Honour the President. It would be a better course than to have the affairs of the Municipality carried out by two separate bodies with separate establishments. It would be better for the Act to come into operation on a certain day, and to have the elections three months earlier. There would then be no difficulty in working the Act when it comes into force.

THE HON. MR. MACAULAY said:—I do not think we can allow section 19 to remain only with the first clause without any reference to the nominations as well as to the elections. The second clause refers to those elected and appointed. This, however, can be settled when we come to deal with section 1 of the Act.

THE HON. SIR HENRY HARRISON pointed out that the word "election" throughout the Act included the appointment of both elected and nominated Commissioners.

The motion was put to the vote and carried.

THE HON. SIR HENRY HARRISON moved that for the second paragraph of section 19 the following be substituted:—

"All subsequent general elections shall be held at intervals of three years, and shall take effect from the 1st April in the calendar year in which they are so held."

He said:—The object of the amendment is simply to put in the words "general elections" for "elections." As was pointed out by the Commissioner of the Presidency Division, the word "elections" might include "bye-elections." By putting in the words "calendar year," the 1st of April must be held to mean 1st of April 11 months before the general elections (?)

The motion was put to the vote and carried.

THE HON. MR. IRVING moved that in the proviso of section 19, for the word "fifty" the words "two hundred" be substituted. He said:—For the offence of personation, I think a heavier penalty than Rs. 50 ought to be imposed, and therefore I move that the maximum limit of penalty under the Rules be fixed at Rs. 200. In England the offence of personation is made a misdemeanour. It is true that, when the breach of any rule constitutes a serious offence, the offence might be dealt with under the Penal Code; but I think it is desirable to make an Act complete in itself, especially such an Act as this.

THE HON. SIR HENRY HARRISON said:—I have no views one way or the other as to this amendment. The majority of offences under these rules would be of a comparatively trifling character. In the event of any body committing a criminal offence, we shall always have the criminal law to fall back upon. If, however, the Council think it better to raise the penalty to Rs. 200, I have no objection.

The motion was put to the vote and carried.

THE HON. SIR HENRY HARRISON moved that in the last line of section 20, for the words "an election" the words "each general election" be substituted. He said:—This is a mere verbal amendment with the object of excluding bye-elections.

The motion was put to the vote and carried.

The HON. MR IRVING in moving that at the end of section 20, and at the end of the second paragraph of section 23, respectively, the words "and such list shall be obtainable on payment of a fee not exceeding eight annas" be inserted, said:—It will be to the interest of all classes that these lists should be readily obtainable; on the other hand it may be advisable to check a too wide application for copies, by the imposition of a small fee.

The HON. BABU KALI NATH MITTAR said:—I do not think this amendment necessary. It will only have the effect of deterring persons from applying for these lists. It is very necessary that candidates for election should have free access to these lists, but if a fee is imposed it will deter some from applying for them. Hitherto no fee has been imposed.

HIS HONOUR THE PRESIDENT said:—The section requires that the lists shall be published, but if a copy of the list is wanted, I understand the object of the amendment is that it should be paid for.

The HON. SIR HENRY HARRISON said:—Hitherto the practice has been to print these lists and copies of them have been given without any charge to those who apply for them.

The HON. MR. IRVING said:—There might be a very wide and unnecessary call for copies of these lists, and the imposition of a small fee would prevent this. The proposal is that the fee should not exceed 8 annas: it might be 1, 2, or 4 annas.

The motion was put to the vote and carried.

The HON. SIR HENRY HARRISON moved that in line 8 of the proviso of section 21, for the word "show" the words "satisfy the Chairman" be substituted. He said:—The difficulty involved by the introduction of the word "show" has been pointed out in the office. The word "show" is ambiguous, and it is considered better to state more clearly what is meant. What is meant is that the person shall produce some *prima facie* evidence to show that he has paid occupancy rates. This is generally done by the production of rate bills. I think the substitution of the words "satisfy the Chairman" for "show" will be an improvement.

The motion was put to the vote and carried.

The HON. SIR HENRY HARRISON moved that in lines 6 and 7 of section 25, for the words "not less than five days before the date of election" the words "not less than five days before the date fixed for the publication of the revised list" be substituted. He said:—This is more than a verbal amendment. It was at first intended that the application under this section should be made five days before the elections, but it has been pointed out by those experienced in working the elections that it would be a great convenience if the bulk of the objections could be got rid of before the publication of the revised list, so that the revised list may, as nearly as possible, correspond with the actual voters. The amendment which I propose will necessitate applications being sent in a good deal earlier. For these reasons I think it will be better that companies, firms and associations of persons should be bound to apply earlier, in order that the revised list may, as far as possible, be correct.

The motion was put to the vote and carried.

The HON. SIR HENRY HARRISON moved that in line 8 of section 27, for the words "officers in all cases made over to them" the words "officer in all cases made over to him" be substituted. He said:—This also is a verbal amendment, and the reason for it is that it is more probable that the duty referred to will be entrusted to a single officer, and at any rate the singular will include the plural.

The motion was put to the vote and carried.

The HON. SIR HENRY HARRISON moved that in line 1 of section 31, for the words "the election" the words "general elections" be substituted. He said:—This also is a verbal amendment, similar to one which has already been made on my motion.

The motion was put to the vote and carried.

The HON. MR. IRVING moved that for the second paragraph of clause (c) of section 32 the following be substituted :—

“In the event of a Commissioner being absent on leave, to be granted by the Commissioners, for a period exceeding three months, and not exceeding twelve months, the Local Government may appoint a substitute to serve in his absence.”

He said :—It appears to me that this amendment is a very reasonable one, while at the same time it is urgently required in the interests of Europeans. The present arrangement is defective, owing to the fact that a constituency may often remain unrepresented for a considerable period during the absence of a Commissioner from the country. In such cases, where the temporary vacancies are not filled up, the continuity of representation could only be secured at the cost of a fresh election. As an illustration of the present arrangement, I may mention that in Ward No. 12 not long ago an elected member, owing to missing his steamer, was absent for six and a half months; during his absence the ward was deprived of his representation, and because he was absent a few days over the prescribed period, a fresh election had to be held entailing both trouble and expense. It is to guard against such a state of things that I propose this amendment.

The HON. SIR HENRY HARRISON said :—I do not think that the provision contained in this section will work well. How is it to be known that a Commissioner will be absent for a period exceeding three months and not exceeding 12 months. In some cases a Commissioner may intend to be absent for only two months, but may stay away for a longer period; or he may intend to return in 12 months, but may be detained for $12\frac{1}{2}$ months, and then as soon as the 12 months expire a fresh election must be made. Seeing that one-third of the Corporation will consist of nominated Commissioners, and two-thirds of elected Commissioners, I think there is some objection in principle to all vacancies caused by absence being filled up by the Local Government. There has hitherto been no serious practical inconvenience felt. Every now and then we have been working with one or two Commissioners less than the complete number, in consequence of absentee Commissioners electing not to resign because they expect to return within the six months. In such cases, if an absentee does not wish to resign, then for a period of six months one ward may be without one of its Commissioners, or there may be one less than the full number of nominated Commissioners; but I cannot say that the existing procedure has caused any practical inconvenience.

The HON. MR. IRVING said :—Many Europeans go away for six or eight months, and they may wish to take leave of this kind. If the next general elections are near at hand the leave would very likely not be asked for, but if the Commissioners have the power of granting leave when it might easily be given, it would be a convenience, more especially for European Commissioners.

The HON. SIR HENRY HARRISON said :—I think the amendment cannot be substituted for the clause in the Bill, which is a disqualifying clause. It may, however, be substituted for the specific clause which provides that no Commissioner shall be disqualified by reason of his being absent for a certain period.

HIS HONOUR THE PRESIDENT said :—I see a difficulty in accepting the amendment as it stands, though I do not see much objection to its principle. The amendment gives the Commissioners power to grant leave or not as they choose. If they do not want a nominated Commissioner, they will not grant the leave, and they will have it in their power to prevent the Local Government from nominating a *locum tenens*. The difficulty consists in there being no alternative in cases where the Commissioners refuse to grant leave.

The HON. MR. IRVING said :—I think it desirable that the Commissioners should have power to grant or withhold leave of this kind. Suppose a Commissioner finds it necessary to go away shortly after the elections: he very probably would wish to keep his seat, and the Commissioners would surely grant the leave. If, however, the absence occurs close to the period of the elections, leave would hardly be necessary.

The HON. SIR HENRY HARRISON said :—Then I think the period of absence without leave should be very considerably reduced—say to two months. If Commissioners can obtain leave, then I think it desirable to require them to obtain leave for all prolonged absences, at any rate for three months.

The HON. BABU KALI NATH MITTER said :—I suppose the effect will be that during the time the leave extends the nominated Commissioner will be only a substitute, and when the Commissioner comes back he will take up his own place, and the nominated Commissioner will retire. So that instead of having an elected Commissioner, you would have the services of a nominated Commissioner for that time. If a Commissioner goes away for six months or twelve months, would it not be better to leave his successor to work till the end of the term, instead of only during his absence? The gentleman who may be nominated would acquire experience, and by the time his experience becomes valuable, he will be superseded by the Commissioner who comes back. I do not think the amendment to be a desirable one.

The motion was put to the vote and negatived.

The HON. BABU KALI NATH MITTER moved that in clause (3) of section 36 the words "construction and" be omitted. He said :—The expenditure of funds for the construction of hospitals is a new power which it is proposed to give to the Commissioners. The power in itself is unobjectionable, but the question is whether the means at the disposal of the Commissioners will be such as to enable them to exercise it. This provision of the law may be thrown at their teeth, and it may be said that they are not performing their duty, inasmuch as they are not exercising this power. I submit that no necessity has arisen for adding this to the powers conferred by the existing law.

The HON. SIR HENRY HARRISON said :—I entirely sympathise with the main part of the hon. member's objection, that it is very undesirable that an additional charge should be thrown on the Corporation, looking to the work they will have to do in the newly amalgamated area. But the reason why this additional power should be conferred is because it is necessary on some occasions that hospitals should be provided for the treatment of small-pox and other contagious diseases. On such occasions it may become necessary to run up temporary hospitals for isolating those affected with the disease. That certainly has been done at Bombay; but we have not the power here to construct hospitals; we have only the power of maintenance. I think this is a flaw in the present Act, though I hope very much that the Commissioners will not be involved in any heavy expenses on account of construction.

The HON. DR. MAHENDRA LAL SIRCAR said :—For the reasons which have been mentioned by the hon. member in charge of the Bill, and to meet such occasions of emergency as have been referred to by him, I move an amendment that after the word "construction" the words "hospitals for contagious diseases which, if unchecked, might prove epidemic" be added. This will limit the power to a considerable extent.

The HON. BABU KALI NATH MITTER accepted the amendment.

The HON. MR. MACAULAY questioned if the word "maintenance" would cover the erection of additional buildings to hospitals. He did not think that the power of the Municipality should be restricted to hospitals for epidemic diseases and objected to the amendment as limiting the power of the Municipality with regard to what is very useful work.

The HON. SIR HENRY HARRISON said :—I am bound to confess that if, for instance, the Medical College Hospital had not been built, and very heavy expenditure had to be incurred for the purpose of building a hospital, considerable pressure might be put upon the Commissioners to contribute to its construction; and I should be very sorry to see expenditure incurred on such an account. At the same time I think it absolutely necessary that the Commissioners should have the power to construct temporary hospitals on emergencies.

The HON. DR. GOOROO DAS BANERJEE suggested the addition after the word "construction" of the words "in cases of emergency."

The HON. MR. MACAULAY pointed out that in the Mofussil Municipal Act, III of 1884, the words used were "establishment and maintenance of hospitals." This is a power generally used throughout the Province.

HIS HONOUR THE PRESIDENT said:—My own view certainly is that the section as it stands in the Bill should remain, and mainly for this reason, that, apart from the present state of the finances, the construction of hospitals is certainly work which is elsewhere only generally considered as a proper duty for a Municipality to undertake. The objection to the Hon. Dr. Mahendra Lal Sircar's amendment is that the Commissioners may be called upon to prove that a particular disease, if unchecked, would prove epidemic.

The clause as it stood in the Bill with the words "construction and" was then put to the vote and carried.

The HON. BABU KALI NATH MITTER moved that in clause 11) of the same section after the word "ceremony" the words "for illuminations, fireworks or the presentation of addresses" be inserted; and that the words "or entertainment in Calcutta" be omitted. He said:—My object is that the cost of "entertainments" should not be defrayed out of the Municipal Fund. If it should at any time become desirable to give a public entertainment, the Commissioners can always give it at their own expense. On some occasions, when the Commissioners were prepared to entertain certain eminent individuals at their own expense, the individuals proposed to be entertained objected. If such an entertainment is desirable on any occasion, there will be no difficulty to find the ways and means. But if such a provision be inserted in the Act, there will be frequent applications for such entertainments, and a good deal of money may be expended for purposes of this kind. On all public occasions, money has been contributed by the Municipality for illuminations and the like. Although there has been no distinct provision of law for that purpose, yet the Corporation, under the belief that no objection would be raised, has spent money for such purposes. Therefore, as far as such purposes are concerned, there will be no objection; but to carry it further will, in my opinion, be objectionable.

The motion was put to the vote and negatived.

The HON. DR. GOOROO DAS BANERJEE moved that after clause (11) of section 36 the following new clause be inserted:—

"(12) Promotion of primary and technical education."

He said:—Section 36 specifies several purposes to which the municipal fund may be appropriated, but one most important purpose has been altogether omitted, I mean education, and the object of this amendment has been to supply that omission. I know it may be said that education is an Imperial purpose, and that the expense for education ought to come out of Imperial and not from municipal funds. Perhaps that may be true as far as high education is concerned, but whether it is so or not it is not my object to discuss. It is a proposition which may be discussed on the amendment of the Hon. Sir Alfred Croft which is on the paper. I venture to think that ignorance and poverty are the main causes of those great sanitary evils which the municipal administration has to cope with, and that the best municipal arrangements from outside will fail to secure the desired object so long as the people are immersed in the depths of ignorance and poverty. You may improve bustees and have more efficient conservancy and other arrangements, but you will fail to restore the health of the inhabitants if they themselves are ignorant of the most elementary principles of sanitation. By spending a small part of the municipal funds for the promotion of technical education, we may help the children of the poor to enable them to learn useful occupations, and thus earn their livelihood; and by spending another small portion of those funds for the promotion of primary education, we may educate them just enough to enable them to read some of those excellent sanitary primers in the vernacular languages. Such expenditure is sure to prove remunerative in the sense that you would thereby secure from the people so educated an amount of willing obedience to your sanitary regulations which may perhaps enable you to dispense with a part of the establishment for enforcing those regulations. Nor is that all. We find in the Mofussil Municipal Act, III of 1884,

section 69, clause 5, that the construction and repair of school-houses, and the establishment and maintenance of schools either wholly or by means of grants-in-aid, forms one of the purposes to which municipal funds may be appropriated; and if the municipalities in the mofussil can afford to expend money on such objects, there is no reason why the Metropolitan Municipality should grudge to do the same.

There is another point of view from which the matter may be considered. The Bill proposes to amalgamate a large part of the suburban area with the town. [Now the Suburbs already enjoy this advantage. There are schools in the suburban area which already get grants from the suburban municipal funds, limited as they are; and now that these areas are to be amalgamated with the town, it will be disappointing expectations and disregarding vested interests if you suddenly deprive them of the aid they now receive.]

I may also point out that in other countries, which we always do well to imitate, municipal funds are largely spent on education. From an abstract which I hold in my hand of the report of the Local Government Board in England for 1880, I find that, whereas two millions sterling were expended on highways, nearly four millions were spent on elementary education. I therefore submit that for the limited purpose of elementary and technical education the Calcutta Municipality ought to contribute something.

The HON. SIR ALFRED CROFT moved that after clause (11) of section 36 the following new clause be inserted:—

“(12) Maintenance, support and inspection of schools, including technical schools”

He said:—There is an important difference between the amendment which I have the honour to move and that which has just been moved. By my amendment the duty of the municipality is not limited to the provision of technical and primary education. It imposes no limit of that kind so far as schools are concerned, but allows the municipality to apply its funds to education whether primary or secondary, whether technical or general. It allows the municipality, first, to establish schools of its own; secondly to support schools, that is to say, to give grants-in-aid to the support of schools maintained by private individuals or by other public bodies; and lastly to inspect schools, where necessary. I do not propose to dwell on the general principles on which the duty of municipalities to provide for education may be defended, nor will I do more than just glance at the very pronounced view of the duties of municipalities in this respect which prevails in England and on the continent of Europe. I need not go so far afield as that. I shall find quite sufficient material for my remarks within the continent of India. The objections which have been raised to the inclusion of education amongst the objects on which municipal funds can be spent are, as far as I have been able to ascertain them, two. They are, first, that education is no concern of an Indian municipality; that if education is to be provided within a municipality it should be provided by the State or by associations of private persons; and the second ground is that in the particular case of Calcutta, where the sanitary requirements of the people are so urgent, it would be unjust to divert any portion of the municipal funds from the objects for which they are so urgently required, to a purpose of less importance such as education. First, then, as to the general principle. When it is said that a municipality as such has no concern with education, that is to me so novel a view that I hope I may be pardoned if I occupy the time of the Council a little in order to show how exceptional that view is, and how much at variance with the common opinion and almost the universal practice in India. This is a point to which the Education Commission which sat in 1882-83 paid a great deal of attention. They took for granted—and in that assumption they were justified by the common practice of municipalities in India—that it is the business of municipalities to take charge of education. They said:—“The obvious advantage of connecting the education of the masses with local popular organisation has long been recognised,” and they proceed to state the extent to which municipalities in India have recognised this principle. The figures they give are somewhat surprising. In 1882 the municipalities in the Punjab spent Rs. 1,51,000 on education; Madras spent Rs. 68,000; Bombay Rs. 80,000; the North-Western Provinces Rs. 52,000; the Central Provinces Rs. 35,000; while Bengal comes last with Rs. 25,000. Then,

again, when we turn to percentages, we find that the Bombay municipalities expended 5·6 per cent. of their total income; Madras 3·8 per cent., and so on until we come down to the municipalities in Bengal, with less than half per cent. As regards Bengal, that proportion is confined to mofussil municipalities, because in Calcutta not one penny is spent on education. On this point the Education Commission remarked:—"In no other province of India do municipal bodies exhibit greater indifference to the claims of education upon the town funds. Even in the city of Calcutta no steps have been taken in this direction, though so far back as 1873 Sir George Campbell expressed a hope that the municipality in Calcutta would move the Legislature to permit the expenditure of some part of its large income upon primary schools for the children of the Calcutta poor." The Commission, I may add, went even further. Reviewing the progress of education in the past, they strongly recommended that the educational sections of the new Municipal Bills, then before the different Legislative Councils, should no longer be permissive, but compulsory. They said that executive orders of clear import and general application issued from 1854 to the present time had failed more or less in all provinces to ensure uniform attention to broad principles prescribed for general guidance; and they added:—"The evidence given before the Commission affords proof of the unanimous conviction entertained in all provinces of India, that the time has come when the exercise of these permissive powers can no longer be left to the discretion of municipal bodies." That view, however, has not generally commended itself to the local Legislatures. In more than one province it is true that under recent legislation the educational clauses of the Municipal Acts are not permissive but compulsory; or else power is taken by the Local Government to decide what proportion of the total municipal income should be devoted to education. But in general the Local Governments have, with one or two exceptions, expressed reluctance to compel these bodies, by executive order, to devote a certain minimum share of their income to education; and while they have not hesitated to express their wishes and expectations in the matter, they have for the most part been content to leave the municipalities concerned to fix the amount of their educational grants, in the full belief that the Boards would of their own motion make adequate provision for the maintenance of schools, and that a policy of compulsion was neither necessary nor desirable. But the general principle was fully accepted both by the Government of India and by the Secretary of State. The Government of India, in reviewing the report of the Education Commission, plainly stated that it was the duty of municipalities to provide for education. They said:—"Under all the Acts for settling the conditions of Local Self-Government in municipalities, provision more or less complete has been made for education;" and they went on to show that the Bengal Government anticipated a contribution of Rs. 1,25,000, for educational purposes from the municipalities of the province, excluding Calcutta.

Such then being the state of current opinion on the subject, it is important to show how far this general opinion, that municipalities should concern themselves with education, has been embodied in legislative enactments. In the District Municipal Act of Bombay I find, amongst the objects to which the municipal fund may be devoted, that adequate provision *must* be made, not *may* be made, for middle and primary schools, and that adequate provision *may* be made for higher schools. And then the Local Government takes power to define what an adequate provision is; and to ensure that the provision shall be adequate by declaring the minimum sum which municipalities are required to spend upon education. Then in Madras, district municipalities are required to provide for all primary and lower secondary schools within the municipal area. These are the provisions for district municipalities. Next I will take the Presidency towns. In Bombay, the Municipal Bill is still under consideration, and it is impossible to say what form the educational sections will take. I understand that they are not likely to depart far from the provisions of the existing Act. The Act of 1872, by which the Bombay Municipality is still governed, is not compulsory but permissive. It allows the municipal fund to be devoted to education of all grades, without any restriction to primary education. So again, in the town of Madras the municipality is required to provide for the elementary education of the poor, and to build school-houses in which such

education may be given. In the Punjab, as in Bombay, the provision is not merely permissive, for the Local Government has power to fix the share of the municipal income which must be assigned for educational purposes. What I have stated is merely a sample of what is going on throughout India. It is true that in Bengal, and especially in Calcutta, the idea of municipalities taking an active share in education is a little strange to us; but I hope I have shown that throughout the rest of India the duty of municipalities to control education, and not merely primary education, is an accepted principle. I will now go on for four or five years, and show that out-side Bengal, and even within Bengal, municipalities have within that period not stood still. I find that from 1881-82 to 1885-86, the municipal expenditure on education throughout India increased from Rs. 4,66,000 to Rs. 11,40,000, of which Rs. 4,22,000 were devoted to secondary schools, and Rs. 4,86,000 to primary schools, Rs. 27,000 to special or technical education, Rs. 2,04,000 to inspection, school buildings, and other miscellaneous objects. In the Punjab, which stood at the head of all the provinces of India in 1881-82, the educational grant remained stationary, at about $1\frac{1}{2}$ lakhs of rupees. Bombay advanced from Rs. 80,000 to Rs. 1,71,000, Madras from Rs. 83,000 to Rs. 1,75,000; while the municipal expenditure on education in Burmah advanced from Rs. 33,000 to Rs. 2,53,000—the reason being that in Burmah large grants had been made to municipalities to enable them to carry on the whole educational system within the municipal area. It was declared to be the duty of municipalities in Burmah to undertake the management of education within that area, and special sources of income were transferred to them to enable them to do so. Even in the mofussil municipalities of Bengal, the educational expenditure rose from Rs. 25,000 to Rs. 82,000. The remarkable expansion to which I have just referred is due in great measure to action taken about this time by the Government of India. In 1881-82 the Government of India decided to relieve municipalities of all charges on account of the police, and to transfer to them the control of certain services which were held to be more within their province, such as sanitation, education, and public works. The transfer of funds to these objects was accordingly carried out in every province of India, and that accounts in a large measure, though not entirely, for the increase of expenditure on education. In Bengal it was hoped that the municipal expenditure on education would amount to Rs. 1,25,000. It has not yet reached that figure, but in many other provinces it has gone far beyond the requirements imposed on municipalities by the change to which I have referred. In Madras, for example, under instructions issued by the Madras Government, municipalities are expected and required to expend one-sixth of their total income on education.

So much for the general question; but I am bound to say that the particular case of Calcutta is in some respects an exceptional one. The sanitary requirements of Calcutta, it is said, are such that they will exhaust and swallow up the whole of the addition of three or four lakhs which is to be made to its revenues by the removal of the cost of the police. I do not know whether the terms upon which the Government makes over that grant to the municipality are such as to compel the money to be spent on sanitation alone, or whether, as in the case of every other municipality to which similar relief has been afforded, sanitation is only one of those objects, education being another. But however that may be, on the general question I cannot say that Calcutta stands in any different position from other large towns in India with regard to education. We have here in Calcutta 22,000 boys at schools of all classes, primary and secondary; but according to our estimate 22,000 is only about half the number of boys that should be at school. It follows that there are about 20,000 boys who get no education at all, not even the rudiments of education. To my mind it seems a matter beyond dispute that Calcutta, as a manufacturing and industrial town, would be the gainer by the education of these 20,000 boys—not merely in the way mentioned by the last speaker that they would be more amenable to sanitary influences, but that education will make them more intelligent citizens, and therefore more useful, and profitable to the town in which they live. That is the simple ground on which municipalities have thought it worth while to spend money on education.

All this of course refers to primary education. As to technical education, there is in or near Calcutta a School of Art and an Engineering College. The

School of Art has, I believe, a great future before it in the development of artistic industries. The engineering college has established such a position and attained such success that the trained apprentices find no difficulty in getting profitable employment all over Bengal. But when boys go to one or other of these institutions they do not even know the rudiments of drawing. They have to learn it from the beginning, and to spend a long time in acquiring that moderate amount of skill which they ought to have already acquired upon entering the school. It appears to me that if drawing classes were established by the municipality, they would do most useful work quite within its province, for the municipality ought not to be indifferent to the development of artistic and industrial skill. Technical schools might in the same way be attached, with great advantage, to the municipal workshops, in order to increase the supply of skilled artisans. This is a crying want, and amply justifies the devotion of municipal funds to technical education. I may mention that in Bombay the municipality contributed Rs. 80,000 to the establishment of a Jubilee Technical Institute, and have made an annual provision of Rs. 5,000 for the same purpose. In Poona the municipality gave Rs. 5,000 to a technical school.

As to secondary education, throughout Bengal and India large sums are expended by the municipalities. In different parts of the mofussil it is felt that the municipalities contain members thoroughly qualified to control education of that kind. They have accepted and managed with the greatest success the secondary schools which have been transferred to them in pursuance of the Local Self-Government policy. This has been done to a very large extent in the mofussil municipalities of Madras, Bombay and the North-Western Provinces. In the great Presidency towns like Calcutta the case is no doubt different. Here private enterprise is so strong that it never will be necessary to spend any large sums on secondary education. At the same time it might very well happen that the Government, on retiring from one of its secondary schools, might make an offer to the municipality to take it over with its grant. If so, there seems no reason why the municipality should refuse to undertake the charge—a charge which would generally involve no additional burden on the municipal fund. Then again, suppose the municipality maintains good primary schools, such as those which are the credit and the pride of Bombay—primary schools attended by hundreds of poor children, who thus secure a far better and sounder education of an elementary kind than private effort can give them. If there are such schools, the municipality might perhaps desire to add secondary classes for the further education of advanced scholars, and if so, I do not think it is the business of this Council to refuse it that permission. It may be taken for granted that the permission will not be misused, as it has not been misused in other Presidency towns in India, where, though they spend large sums on primary education, the expenditure on secondary schools is trifling. In view of the position which the municipality of the metropolis of India has a right to claim, we may very well say—It is open to you to establish, without interference from us, a complete system of education according to your view of what is necessary and sufficient, after other and more important requirements have been met. Of that, the municipality must be the best judge. The clause which I propose to introduce is not a compulsory one, as it is in Bombay, Burmah, and the Punjab. All that we propose to say is that, you *may*, if you see fit, spend a certain sum upon education; primary and technical education in the first instance; secondary education if you think it necessary. I confess that I do not see how the claim can reasonably be refused. We have this simple fact, that in all the rest of India municipalities do undertake the control and support of education, and do not limit it to primary education. If that is right for other municipalities, it is right also for Calcutta. If it is wrong in Calcutta, then you declare that the policy followed in every municipality in India is wrong. It seems to me that the burden of proof lies on those who deny that the municipality of Calcutta is qualified to exercise powers which are conferred on and exercised by every other municipality in India.

The HON. SIR HENRY HARRISON said:—As regards the amendment of the Hon. Dr. Gooroo Das Banerjee, I dare say the majority of the Council are aware that the original Bill contained a provision for sanctioning expenditure on primary education. The reason was that we found that in the Suburbs such

expenditure was actually being incurred, there being a grant of Rs. 3,000 for the purpose. We thought it would be invidious to deprive the Suburbs of what they had hitherto received, the intention being merely that their rights should be preserved to them, while at the same time it was foreseen that the words might be capable of extension to other primary schools. And after the fullest consideration I am constrained to say that so strong a case has been made out on behalf of primary education that I cannot go against this amendment. I myself feel bound, seeing the weight of precedent and reason adduced for it, to vote so far as to put in a provision allowing the municipality to provide for primary education and technical education.

Then I come to my hon. friend Sir Alfred Croft's amendment, and here I find myself in a position of very great difficulty, because on the one hand I look on the amendment with the greatest possible apprehension, on the other hand I am equally bound to say that he has made a very strong case indeed; but the stronger the case the stronger is my apprehension. I feel that the case made out is so strong that it will be very difficult for me to induce the Council to reject the amendment. I am equally bound to admit that, so far as the precedent and practice of Bombay and other municipalities are concerned, they are all against me. In the Bombay draft Bill, which has passed the Select Committee, expenditure upon primary education is made compulsory, while as regards secondary education it is optional. In Bengal under the Municipal Act mofussil municipalities can spend money on education in giving grants-in-aid to schools and in various other ways. So that, except so far as our own Act is concerned, we have to face the contrary practice all round, and my hon. friend Sir Alfred Croft is justified in saying that the onus lies on us to disprove the propriety of adopting his amendment. Nevertheless that is which I am bound to attempt. My hon. friend referred to two arguments which might bear specially against his proposal. One is that the proposal is against the weight of practice or precedent elsewhere. That argument cannot be met, because he proved successfully that both practice and precedent are against us. He also referred to the argument that heavy expenditure is required for the sanitation of Calcutta and the Suburbs, and that is the only argument I feel bound to press upon the consideration of the Council. The first point to recollect is that municipalities in India are essentially poor bodies; the municipalities of Calcutta and Bombay are by far the richest in India, but yet their means cannot compare with the means at the disposal of civilised municipalities elsewhere. Calcutta has to levy its taxation almost entirely by rates on property, and the assessable value of property in Calcutta does not exceed £1,200,000 a year. It is considerably less than one-twentieth of the rateable value of London, and the population of that city is only seven times larger. It is less than one-tenth of New York with a population twice as large. It is less than one-fourth of Philadelphia with a population only slightly larger: so that the Calcutta Municipality cannot command anything like the funds of other large cities. But when we come to the question of expenditure, then we find that sanitation in Calcutta attains such importance that, so far from the expenditure being less, expenditure quite on the same scale as in English cities becomes obligatory. We are to have a large area in the most insanitary condition added immediately to the town. Nobody would say that the town itself is in anything like a satisfactory sanitary condition. The difficulty in adding the suburban area has been simply and solely this, that no one could suggest the sources from which the funds should come. The Amalgamation Committee was distinctly of opinion that about six lakhs ought to be added to the funds of the municipality from some source. I myself formed a more sanguine estimate, and leaned to the opinion that probably four lakhs may suffice. I took a more sanguine estimate than any other member of the Committee. Can any one in this Council doubt that as soon as the suburban area is added to the town we shall have the fullest possible use for all the funds at the disposal of the municipality? I admit that education is a legitimate subject of municipal expenditure, but I also maintain that it is a secondary object. It is not to be put on the same plane as the primary objects, such as the repair of roads, the removal of refuse, cleansing, sewerage, supplying water, and in one general word "sanitation." If education is to supplant any of these objects, would it be right? I put it to the Council whether if Rs. 50,000

be taken from the purposes of sanitation and given to education, it would not be a mistake. That is a point on which I am so satisfied that I must press this view on the attention of the Council. I am far from sanguine that the effect of this amendment would be that only a small sum will be expended upon secondary education, but so far from that being likely, I feel it most probable that the expenditure under this head would soon be large. The people of Calcutta have a strong, natural and proper sympathy for high education, and the municipal body being in itself extremely sympathetic with educational institutions, we should have siege laid to our funds by perhaps the most experienced and skilful body that you could find to conduct such a siege successfully, namely, the large body of educationists in Calcutta who so much deserve and command the appreciation of the public; and the very fact of their appealing for help would go far to secure it. In the first instance some institution of an extremely beneficial character, and which met a recognised want, would probably come forward and would almost certainly succeed in getting a grant. One precedent having broken the ice, others would come in on the same ground, and before long—I appeal to hon. members who can judge of these matters—the educational budget would be a very ample one indeed. While that would be the case on the one hand, is there any reason to suppose that the natural and laudable desire of the rate-payers to keep taxation at its lowest limit would be diminished? While money would be granted freely for educational purposes, the temptation would be almost irresistible to effect economies in other directions in order to balance for the grant given to education. It is but fair to admit that my argument goes beyond the case of Calcutta. I admit that it equally applies to other municipalities in India. But strong as is the case which has been made out in other ways, my hon. friend has on this point given me considerable assistance, because he has shown that there is no head of expenditure which has so rapidly increased with municipalities as education. He showed that the educational grant had grown from four lakhs to eleven lakhs in a short time. That is exactly what I should have expected. There is no object of expenditure which is likely to develop more rapidly. The one head which would soon grow with the greatest rapidity would be education. But as regards the circumstances of educational expenditure in other countries, there is considerable difference. In England, education is placed under special School Boards under the Act of 1870, and these School Boards fix their own expenditure, and they spend it. But it is obvious that Local Sanitary Boards or Municipalities, which are totally distinct bodies, are not deterred from spending money on sanitation because other distinct bodies are spending money on other objects. But in our case we should have the same body which is spending money on education—the body which has to judge of sanitary requirements—and there would be an inevitable tendency to substitute one class of expenditure for the other. Then again the difficulty with regard to each community in Calcutta would be very serious. Calcutta is not composed of one homogeneous community, whereas you have in mofussil municipalities a more or less homogeneous population, where there are Hindus or Mahomedans, or Hindus and Mahomedans. But here we would have classes of expenditure fundamentally different, which would come before the Municipal Commissioners. We have large schools of the European and Eurasian element which would appeal for support, and large schools of the native communities. A great many of these are no doubt self-supporting. Secondary education in Calcutta can be made self-supporting, and that is a strong reason why aid is not necessary for this class of schools. But it would be a very serious task for the Corporation to do justice between all the communities which would appeal to it for aid.

Lastly, there is this special difficulty that it is a fundamental principle which has been laid down by the Government of India that, as a rule, money should only be expended by municipalities on objects which are under municipal control; but although the amendment includes cases in which the municipality might have such control, it allows the municipality to make grants to any schools in behalf of which sufficiently strong pressure is brought to bear upon it, without there being any control at all. If a municipality cares to spend money on education, I think it extremely important that they should themselves exercise a control over its expenditure, and I would suggest that we ought to introduce some provisions for constituting Local School Boards, and for the imposition of a special

educational rate, because the present rates have been certainly fixed with a view to the requirements of the town without taking into account any expenditure on education, and if such expenditure is to be added, I certainly think that power should be given to levy an educational rate.

For these reasons I think it extremely important that the Council should not introduce into Calcutta the principle of applying municipal funds for the purposes of higher education.

The HON. DR. MAHENDRA LAL SIRCAR said:—After the exhaustive speech of the last hon. speaker, conclusively disposing of the arguments of the hon. mover of the amendment, it would be superfluous for me to say much. I would simply ask the Council from what fund it is contemplated to provide for the maintenance, support and inspection of schools, and the maintenance of free libraries. It must be from what is known as the General Fund; and I would ask if anything of that fund would remain after it had been exhausted by the very comprehensive items of expenditure which had to be provided for out of that fund. Unless, therefore, it is intended to impose a new rate—an education rate—it will be found extremely difficult in practice to divert any portion of the Municipal Fund towards such purposes which, in my humble opinion, has no direct connection with the public health, safety and convenience. Impose an education rate, and then we shall know what portion of the Municipal Fund to appropriate to educational purposes. But unless you do so, to expend any portion of the municipal revenues upon education will simply be a fraud upon the rate-payers. With all my love for education, I have not been able to persuade myself that the provision of education forms a part of municipal duty. The arguments brought forward in favour of it might as well justify the municipality to maintain an army, a body of volunteers, Hindu temples, Mahomedan Masjids, Christian Churches. If you once adopt the principle of providing from the municipal fund for the maintenance, support, and inspection of schools, there would be no limit to the expenditure. Already there are a very large number of schools, and I hope the number will be multiplied a hundredfold. Would your municipal fund suffice for the provision of all these schools? The community of Calcutta is a heterogeneous community, and the question of nationality and race will most unpleasantly spring up. You will have Hindus and Mahomedans and Christians all clamouring for support of their schools from the municipal fund. Would the Commissioners be able to meet all this clamour? If you can impose an education rate, by all means have such a fund and declare the purposes to which it should be applied, but not otherwise.

The HON. THE ADVOCATE-GENERAL said:—As I intend to vote against this amendment, I consider it necessary to say a few words lest my silent vote should be supposed to indicate that I do not sufficiently appreciate the arguments which the Hon. Sir Alfred Croft has adduced in favour of the advantages of education, or that I am opposed to the general views he has expressed. If I could approach the subject of this discussion with the fact that the municipal funds of this town were unencumbered and in a flourishing condition, and with the assurance that the money which would be raised would be more than sufficient to supply all the wants of the town in respect of its sanitation, I would consider the present a proper time for discussing the question raised. Unless we are satisfied that the requirements of the municipality can be met in this respect, we are not in a position to introduce another subject of expenditure. Therefore, I do not intend to consider or discuss the question whether, strictly speaking, municipal institutions are concerned in education or not, nor even the merits of the smaller proposition put forward by the Hon. Dr. Gooroo Das Banerjee in reference to the larger measure advocated by the Hon. Sir Alfred Croft; I wish to impress upon the Council that the time has not arrived for these amendments. If I were perfectly satisfied that the funds now in hand were not all required for sanitary purposes in particular parts of the town of Calcutta, then, as I said before, the question would arise. So long as the Municipal Funds are urgently required for sanitary and other purposes, I would protest against enlarging the area of the subjects to which they might be applied. I would not enlarge it beyond the purposes stated in section 30 of the Bill.

And here I would point out a little discrepancy between section 36 and the amendments proposed to be introduced into it. Section 36 says—"The purposes expressly authorized by this Act shall be held to include the objects connected with the public safety, health and convenience hereinafter specified," that is to say—expenditure on account of certain purposes detailed in clauses (1) to (11) of the section. To these the Hon. Sir Alfred Croft would add "the maintenance, support and inspection of schools, including technical schools, and the provision of free libraries" as a twelfth subject of expenditure. This clause would be governed, as the whole of the other clauses are, by that which preceded them, viz., by objects connected with public safety, health or convenience. I assert none of these heads comprehends education and free libraries. The Hon. Dr. Gooroo Das Banerjee, who is a learned lawyer, perceiving very clearly that unless he could in some way associate this educational purpose with sanitation, or some one of the purposes of the section, ingeniously connected it with sanitation. He said that if you give the people education you purify their hearts, their thoughts and their manners, and you will consequently be able to reduce your expenses of sanitation and your establishments, and in due course of time less expenditure will be required for sanitation. But that is after all an indirect means of aiding sanitation. I think if he is entitled to use the argument to which I have just adverted, I am equally entitled to answer it by saying if you are justified in incurring expenditure in purifying the hearts and minds of the people, why not enable them to purify and cleanse their bodies by the help of soap purchased out of Municipal Funds and distributed gratuitously in large quantities, and thus aid the scheme of sanitation by an indirect means as potent as that advocated by Dr. Gooroo Das. I must not be supposed to complain of the argument used; I would merely point out that, unless ingenuity was brought to bear on the subject and used to afford some support to the position that education must be placed by the side of sanitation, the motion must fail. I think I have said sufficient to expose the fallacy of the argument, and I earnestly ask the Council that unless sufficient provision can be made for the necessary purposes of sanitation, we should not think of opening out new sources of expenditure for which, as the hon. member in charge of the Bill had told the Council, there would be numerous claimants. For a time it may be that this provision will merely be a permissive one. The municipal body is a large body with an experienced Chairman at its head. He may lead them in most cases rightly; but it may happen that members of the Municipality, holding the views of the hon. movers of these amendments, may insist upon education being provided out of Municipal Funds and succeed in over-ruling their opponents: in such a case there would be a grave responsibility incurred if the Municipal Funds be diverted from their legitimate objects of expenditure. Under these circumstances, I shall oppose these amendments.

The Hon. BABU KALI NATH MITTER said:—From the amendment which I moved on this section it will be quite evident that I am seriously alarmed at the prospect of expenditure which the Commissioners will not have the means to meet. I objected to "entertainments" because of its being a source of expenditure, and secondary education is thrown upon the municipality. I certainly think that the expenditure on such an object would be enormous, and that the Commissioners will not be able to resist the temptation of spending money under this head: the cry for help will be so great that it will be impossible to resist it. When this matter was discussed by the Commissioners, though one party was violently opposed to the introduction into the Bill of education as one of the objects of expenditure, because the funds at disposal would not enable them to spend money on education, another party, equally strong, thought that at any rate primary education should be provided for. Ultimately the latter prevailed, and the resolution that was passed was that, so far as primary education was concerned, some provision ought to be made. As has been very justly pointed out by the hon. mover of the first amendment, that at the present time some of the schools which exist in the area going to be added do receive some contribution from the Suburban Commissioners, it was thought proper at one time to provide for them, and no further. To that limited extent I am quite prepared

to support the hon. member, because I think it right that the schools which at present enjoy a contribution should continue to enjoy it. But beyond that I am not prepared to go. The prospects of the future municipality seem to me to be gloomy. Powers are being given to them in the exercise of which it will be necessary to have large sums at their disposal; but as far as I have been able to see, those funds are not available. That being so, I regret I cannot agree to the amendment of my hon. friend Sir Alfred Croft.

The HON. DR. GOOROO DAS BANERJEE in reply said:—One of my hon. colleagues has been pleased to observe that the diverting of any portion of the municipal fund to purposes of education will be a fraud upon the rate-payers, unless they are previously told that part of the taxes they are paying will be devoted to that purpose, and unless an education rate is levied. We know that, in the suburban area at any rate, it can by no means be open to such remarks, because we have such provision made in the Act in force there. Therefore I take it that the strong language in which my hon. friend has criticised this amendment is after all a matter of rhetoric and eloquence with a large measure of which Nature has blessed him. But the ground upon which I based the amendment was that it would be a matter of disappointment to expectations and vested interests to deprive the suburban schools, which already enjoy such contributions, from their benefit after the passing of this new law.

Then with reference to the remarks of the hon. the Advocate-General, he observed that the time had not arrived for the appropriation of any part of the municipal fund to purposes of education. I freely confess that I feel the force of his observations and those of the Hon. the Chairman of the Corporation, that for some time to come the municipal fund will be sufficiently taxed by new burden thrown upon it. But still I cannot persuade myself that the provision of a small contribution which the limited scope of my amendment will necessitate will be anything but remunerative. I am sorry I have not been able to place in the hands of the Advocate-General some of those simple sanitary primers in Bengali which ought I think to be scattered among the poor population of Calcutta. I may be a little enthusiastic in my admiration of these little books, and of the importance of primary education in securing free and willing obedience to our municipal regulations on the part of the people. But I am not singular in my expectations, for such expenditure has in other places been regarded as remunerative. The small extent to which the municipal funds will be taxed will be more than returned—if not immediately, certainly in the course of a few years.

HIS HONOUR THE PRESIDENT said:—I think I ought to make a few remarks before putting this question to the vote. I confess that the turn which the debate has taken on this point has rather disappointed me. I have always been told that the municipality, under the guidance of its admirable Chairman, had really been doing very good and very great work during the last fifteen years. I had been led to suppose that they were capable of expending their funds with something like reason, and that really they might be left to themselves in these matters. Again I have been informed on the best authority that though they loved education, yet they also loved sanitation, and that they were most eager to carry out whatever was reasonable in the recommendations before them. I had certainly gathered also that under the guidance of their able Chairman they had very considerable powers of resistance, but now we are informed that, however hard up they may be, however their funds were pledged to sanitation, however impossible it may be to spend money on schools, yet on the very first onset the cry of the body of educationists would be so strong that both they and their Chairman would be incapable of resisting the appeal, and that their funds would be at the mercy of everybody who came to them. I am not disposed to think that the Municipal Commissioners of Calcutta are so weak. I myself believe that, with the advice and assistance they are likely to get, they will be capable of spending money, at all events on primary education, wisely and well. The principle has been accepted in every town in India, and certainly elsewhere. I do not want to discuss the necessity or the propriety of it in Calcutta, but as a matter of principle I am not prepared to tie up the hands of the municipality, and to say that without special legislation they shall not spend a penny on primary and technical education.

The Hon. Sir Alfred Croft's amendment to insert after clause (11) of section 36 the following new clause—“(12). Maintenance, support and

inspection of schools, including technical schools," being put, the Council divided:—

Noes 9.

The Hon. Dr. Gooroo Das Banerjee.
The Hon. C. H. Moore
The Hon. Dr. Mahendra Lal Sircar.
The Hon. Babu Kali Nath Mitter.
The Hon. G. Irving.
The Hon. Moulvie Abdul Jubbar.
The Hon. Sir Henry Harrison.
The Hon. T. T. Allen.
The Hon. the Advocate-General.

Ayes 4.

The Hon. Sir Alfred Croft.
The Hon. C. P. L. Macaulay.
The Hon. H. J. Reynolds.
His Honour the President.

So the Motion was negatived

The Hon. Dr. GOOROO DAS BANERJEE's amendment to insert after clause (11) of section 36 the following new clause—“(12) Promotion of primary and technical education,” being put, the Council divided:—

Ayes 7.

The Hon. Dr. Gooroo Das Banerjee.
The Hon. Babu Kali Nath Mitter.
The Hon. Sir Alfred Croft.
The Hon. Sir Henry Harrison.
The Hon. C. P. L. Macaulay.
The Hon. H. J. Reynolds.
His Honour the President.

Noes 6.

The Hon. C. H. Moore.
The Hon. Dr. Mahendra Lal Sircar.
The Hon. G. Irving.
The Hon. Moulvie Abdul Jubbar.
The Hon. T. T. Allen.
The Hon. the Advocate-General.

So the Motion was carried.

The Hon. Dr. GOOROO DAS BANERJEE moved that the following new clause be inserted after the above:—

“(13). Contribution to any neighbouring municipality for sanitary purposes.”

He said that after the amalgamation the new municipality would be brought into immediate contact with poor municipalities on the north, east and south of the town. These poor municipalities not being at any considerable distance from the town, the health of the town might be affected by those subtle agencies by which disease is spread, so that for the health of the town the sanitary improvement of these poor municipalities would continue to be as much necessary as the improvement of the suburban area, now going to be amalgamated, has been felt to be for the improvement of the present town. And if these neighbouring municipalities are really from want of funds unable to carry out such matters, it is certainly necessary that the town should curtail some of its items of expenditure, for certain purposes which may without offence be considered superfluous, for the purpose of applying the money to that which is necessary not only for the health of its poor neighbours, but also for that of the town itself. And here we have very good precedent. In section 70 of the Mofussil Municipal Act, there is a provision for making similar contributions to neighbouring municipalities. If poor and backward municipalities in the mofussil can afford to make these contributions, there is no reason why the richest and most advanced municipality of the metropolis should be unable to make similar contributions to its poorer neighbours, especially when the contribution will be for its own welfare. It should also be borne in mind that the insertion of this clause will not impose any obligation on the Calcutta Corporation, but will only enable it to make grants when it has funds at its disposal and when a fit case is made out, and the Calcutta Corporation itself will be the judge of such fitness. They who will be the judges have themselves in one sense an opposite interest, and there is no likelihood of their making any such contribution unless the necessity is clearly proved and unless the contribution be for their own benefit.

The Hon. SIR HENRY HARRISON said:—I entirely agree with the hon. member, and precisely for the reason he has given. It might, for instance, be for the benefit of the health of Calcutta to assist in the sanitation of the island of Ooltadanga or of Chitpore or Cossipore. The municipality would be very unlikely to sanction any expenditure unless the Commissioners were satisfied that a sufficient case was made out. I am afraid I shall again incur the criticism which His Honour the President directed against the Commissioners. It is better, however, to be conscious of your own weakness than to pretend to a strength which you do not possess. I am afraid that with their strong sympathy for education, the Commissioners would be unable to resist such

pressure; but in the case under consideration they will be very unlikely to vote funds for any other Municipality unless an overwhelming case were made out.

The HON. THE ADVOCATE-GENERAL said he thought that, with the amalgamation of the Suburbs, this amendment becomes an absolute necessity. The motion was put to the vote and carried.

The HON. SIR ALFRED CROFT moved that the following new clause be added to section 36:—

“Provision of free libraries.”

He said—Little argument is needed to show that the establishment of a free library in the town would be a great advantage to an educated population, and it is proposed to allow the municipality to devote a portion of its funds to such a purpose. The provision would be permissive. Such a provision is contained in the District Municipal Act of Bombay, where Municipal Funds may be devoted to the maintenance of libraries and museums. In the particular case of Calcutta, the question derives importance from the fact that two years ago a proposal was actually made that the public library at the Metcalfe Hall should be transferred to the control of the Calcutta Municipality, or else that the Municipality should make a contribution to it. The desirability of having such a library was admitted, but there were two reasons why the Municipality did not then accept the offer. In the first place they doubted whether the project was expedient at the time and in the circumstances that existed; but in the second place they pointed out that the Municipal Act made no provision for the application of Municipal Funds to such an object. The Government of Bengal, in addressing the Municipality on the subject, said that, should the Corporation be inclined to devote its funds to such a purpose, the necessary provision would be introduced into the new Municipal Bill. As it seems to me that the question may arise hereafter as it did before, and that possibly the Calcutta Corporation may then desire to devote a portion of its funds to such a purpose, a clause enabling them to do so should be inserted in the Bill.

The motion being put, the Council divided:—

Ayes 9.

The Hon. Dr. Gooroo Das Banerjee.
The Hon. G. Irving.
The Hon. Moulvie Abdul Jubbar.
The Hon. Sir Alfred Croft.
The Hon. Sir Henry Harrison.
The Hon. C. P. L. Macaulay.
The Hon. H. J. Reynolds.
The Hon. the Advocate-General.
His Honour the President.

So the Motion was carried.

Noes 4.

The Hon. C. H. Moore.
The Hon. Dr. Mahendra Lal Sircar.
The Hon. Babu Kali Nath Mitter.
The Hon. T. T. Allen.

HIS HONOUR THE PRESIDENT said:—The Council will remember that on the 7th of January the Select Committee laid before the Council the first instalment of their report, and I then took the opinion of the Council as to whether we should proceed to consider that report after its publication, or whether we should wait till the full report of the Committee was before us; and the general opinion seemed to be that we should proceed with the consideration of the preliminary report of the Select Committee. I was under the impression at that time that the full report would have been published before now. In that I have been disappointed. I have no doubt that the Select Committee are very wise and right in not hurrying the matter, but I think it necessary to explain that I should not have asked you to go on with the consideration of the first instalment of the report unless I had reason to suppose that the rest of the report would have been ready by this time. Neither can I tell you now when it will be ready. When it is ready, it will be published, and time will be given for its consideration. I propose to adjourn the Council now, and call you together again for a purely formal meeting to receive the report when it is ready, and then to fix a day for the consideration of the report.

The Council was adjourned *sine die*.

GORDON LEITH,

Offg. Asst. Secy. to the Govt. of Bengal,

Legislative Department.

CALCUTTA

THE CANAL REVENUE REPORT FOR 1886-87.

No. 289.IA.

Government of Bengal.

PUBLIC WORKS DEPARTMENT.

Irrigation.

Dated Calcutta, the 20th February 1888.

RESOLUTION.

THE CANAL REVENUE REPORT FOR 1886-87.

READ—

The Canal Revenue Reports for 1886-87, and the Chief Engineer's note on the same.

The total outlay direct and indirect to the close of the year 1886-87, on canals in Bengal, of which capital accounts are kept, has been Rs. 6,97,11,574. Of this sum Rs. 8,66,000 have been contributed by the Imperial Government from Famine Relief and Insurance funds, Rs. 5,91,91,309 have been charged to loan funds, and Rs. 88,78,410 have been provided from Provincial revenues. In addition to the sums abovementioned, Rs. 7,75,855 have been expended on surveys, &c., for irrigation works which have not been carried out.

2. There are now in actual operation in Bengal 837½ miles of canal of which 608 miles are navigable. The total area commanded by irrigation canals is 2,698,846 acres, of which 4,17,821 acres, producing crops of the estimated value of Rs. 93,34,374, were irrigated during the year. The total number of boats plying in the canals was 1,81,173, of which 27,314 were passenger boats. The total value of goods passing the canals in boats and rafts aggregated Rs. 7,78,30,811 approximately.

3. The receipts from, and expenditure on, the canals in operation for the last three years, are given in the statement below, the figures include indirect charges:—

NAME OF CANAL.	1886-87.		1885-86.		1884-85.	
	Receipts.	Expenditure.	Receipts.	Expenditure.	Receipts.	Expenditure.
	Rs.	Rs.	Rs.	Rs.	Rs.	Rs.
<i>Major Irrigation Works.</i>						
Orissa Canals	1,79,617	5,20,635	2,07,350	3,56,678	1,43,585	3,29,806
Midnapore Canal	2,34,185	2,35,249	2,62,484	2,18,127	2,57,065	2,31,915
Hudgelle Tidal Canal	56,404	23,945	52,455	50,147	48,507	38,348
Sone Canals	9,18,429	6,15,558	10,62,648	5,84,002	8,62,474	6,35,570
Total	15,86,629	13,95,387	15,84,935	12,08,954	13,07,521	12,35,639
<i>MINOR WORKS AND NAVIGATION.</i>						
<i>Irrigation and Navigation Works.</i>						
Baran Canals	12,427	28,659	41,143	23,331	9,841	25,598
Calcutta and Eastern Canals	4,85,054	1,22,204	4,79,484	1,96,209	5,69,726	2,61,314
Orissa Coast Canal	29,428	61,420	13,718	30,712	.....	.....
Total	5,25,609	2,82,349	5,34,345	2,50,252	5,79,567	3,16,912
GRAND TOTAL	19,12,238	16,78,436	21,19,280	14,59,206	18,87,088	15,51,551

The net income for the year was therefore Rs. 2,36,762. Interest amounting to Rs. 22,91,006 was, however, payable to the Imperial Government, so that there was a deficit of Rs. 19,56,284, to be met from Provincial revenues. This result is unfavourable as compared with that of the previous year, and is owing as much to a decrease in the receipts, the cause of which is explained further on, as to an increase in the expenditure owing to the necessity for special heavy repairs.

4. On the Orissa canals, the occurrence of a large breach in the main weir of the system, that on the Mahanadi river, on the 26th June 1886, necessitated a very large outlay, of which about one and a half lakhs were spent within the year, and the rest in the following year, the work being completed before the rains of 1887. Considerable damage was also caused by the floods of 1886 to nearly all the other weirs, the result being that, with scarcely an exception, the expenditure on them during 1886-87, was in excess of that of the previous year. On the Sone canals the repairs to the centre and Baroon shore sluices of the Sone weir, and the replacing of the old four feet thick piers by piers of six feet thickness caused an increase in the expenditure. On the Midnapore canal the repairs to tidal locks and silt clearance of tidal reaches were heavier than usual. Lastly on the Orissa Coast Canal the repairs on account of the floods and cyclone of 1855, added about Rs. 40,000 to what would otherwise have probably been the cost of maintenance.

5. The revenue collected in the last three years on the works mentioned in the above statement is shown below :—

HEAD.				REVENUE.		
				1886-87.	1885-86.	1884-85.
				Rs.	Rs.	Rs.
Water-rates	...	...	...	10,43,343	12,33,612	9,46,808
Navigation	...	...	...	7,88,685	8,34,780	8,22,187
Miscellaneous	...	...	...	80,170	50,888	1,17,593
Total	...	...	...	19,12,198	21,19,280	18,86,588

6. The assessments or earnings of the same year are as follows :—

HEAD.				EARNINGS.		
				1886-87.	1885-86.	1884-85.
				Rs.	Rs.	Rs.
Water-rates	...	...	...	9,49,260	10,45,339	13,41,655
Navigation	...	...	...	7,88,685	8,34,780	8,21,876
Miscellaneous	...	...	...	80,171	90,481	81,519
Total	..	...	...	18,18,116	19,70,600	22,45,050

The revenue shows a falling off under both heads of water-rates and navigation. As regards the water-rate, the decrease is due partly to the falling off in the area irrigated, and partly to the much smaller amount of arrears to be collected as compared with the balance at the beginning of the previous year. Allusion is made to the falling off in navigation further on.

The excess of revenue over the assessments is due largely to the collections of arrears of water-rates of former years.

7. The arrears of water-rates outstanding at the close of each of the last three years, are shown in the statement following :—

NAME OF CANAL.	ARREARS.		
	1st April 1887.	1st April 1886.	1st April 1885.
	Rs.	Rs.	Rs.
Orissa Canals	87,458	61,884	77,869
Midnapore Canal	50,749	69,972	1,11,212
Sone Canals	2,31,582	3,98,321	6,95,208
Sarun Canals	26,437	15,912	40,022
Total ...	3,96,226	5,49,089	9,24,311

The result for the year may be considered favourable, and shows a satisfactory reduction in the total amount of arrears. The remissions made amount to a comparatively small sum, and point to an improved system of working both as regards assessments and collections.

8. To understand more clearly the results of the working of the year, it is necessary to distinguish between the collections of arrears and those of the current demand. Of the former a sum of Rs. 4,10,658 or 77 per cent. of the outstandings of former years was adjusted. Of this amount 86·4 per cent. was collected, 5·5 written off as irrecoverable, and 8·1 per cent. remitted. Of the current year's demands (which include Rs. 43,645 not payable till after the expiry of the year) Rs. 2,37,196 or 25 per cent. only is left for recovery, 0·3 per cent. was remitted and the balance collected. On the Sone canals very good results were obtained, more especially in the Shahabad district. A considerable sum of arrears was, however, written off as irrecoverable. In Gya an improvement in collections is apparent, and the remissions are unimportant. In Patna, although remissions are less than in the other districts, the collections were considerably smaller. In Orissa remissions were merely nominal; but collections of the current demand cannot be considered satisfactory, and resulted in an increase in the arrear balance at the end of the year. The results in Midnapore are satisfactory both as regards collections and remissions. In Sarun the collections of the year, including arrears, amounted to less than one half of the total of the guarantee for the year, a result which must be considered far from satisfactory. On the whole the results of the year, with the exception noted above, show a considerable improvement in the working of the principal systems; and the Lieutenant-Governor notices with approval that the orders of the Local Government have received the careful attention of Civil officers. The arrears still amount, however, to a large proportion of the year's assessments, and Sir Stuart Bayley is hopeful that a continuance of the measures introduced will result in a further reduction of arrears, and allow of greater facilities for the prompt realization of the current demand.

9. The total number of certificates for the recovery of arrears issued during the year was 30,504 against 60,942 in the previous year in all districts. None were issued in the Gya District. The decrease is attributable chiefly to the large numbers previously issued under the stringent orders of Government for the recovery of arrears, but it is confidently expected that less recourse to this procedure will be necessary in future. The immediate effect of the increased exertion in collecting arrears has doubtless had its effects in bringing about the state of friction which subsequently rendered necessary the appointment of a Commission to enquire into the working of the Sone Revenue system.

10. Information regarding complaints is either non-existent or very meagre in the reports from Superintending Engineers and Revenue Authorities so that it is impossible to say whether the canal administration worked smoothly or not. That it was not doing so formerly is clearly shown by

the agitations of late years on the Orissa and Sone Canals; but, from what little can be gathered on this point in the reports, there appears to be no doubt that there was a decided improvement in this respect in the year under review. Further information should be afforded in future reports.

11. The areas irrigated (actuals) during the last three years are detailed in the following table.

						1886-87.	1885-86.	1884-85.	
						Acre.	Acre.	Acre.	
Orissa	{	Kharif	...	...	...	75,269	70,563	54,181
		Rabi	...	...	...	2,440	1,605	2,994
		Perennial	...	...	...	.....	171	197
		Total	...	...	...	77,709	72,339	57,372
Midnapore ...		Kharif	...	...	...	69,762	70,604	69,294
Sone	{	Kharif	...	...	...	30,082	80,792	131,372
		Rabi	...	...	...	16,662	50,610	77,558
		Perennial	...	...	...	11,626	10,527	9,262
		Hot-weather	...	...	...	15,278	10,857	959
		Five-year's lease	...	...	...	194,556	179,784	151,510
		Total	...	...	...	268,204	332,570	370,661
		Total Major works				...	415,675	475,513	497,327
Sarun	{	Kharif	...	...	...	566	888	1,916
		Rabi including hot-weather	...	...	...	1,980	3,677	5,307
		Total Minor works				...	2,146	4,565	7,223
		GRAND TOTAL, MAJOR AND MINOR WORKS				...	417,821	480,078	504,550

NOTE.—The figures for the Sone canals for the years 1884-85 and 1885-86 do not agree with those given in last year's Resolution. The reason is that last year the areas "assessed" within the year were given as the areas "irrigated" the figures for 1884-85 not being then available. The figures now given have been obtained from the Superintending Engineer's report, and show the areas actually irrigated within each year.

A still further decrease in the total area under irrigation has taken place, and the reason is not difficult to assign. The decline is entirely in annual leases, and chiefly on the Sone canals. The season was one of favourable rainfall, and the need for irrigation not pressing. On the other hand the steady increase in the area under five-years' leases on the Sone and in the area leased on the Orissa canals which is almost entirely under five-years leases, appears to be a satisfactory indication that the idea is gaining ground that it is advantageous to lease for a long term at a reduced rate as an insurance against failure in a bad year of rainfall; and the result will be probably a gradual extension of irrigation which cannot be expected under a system of short leases, the irrigation under which is subject to fluctuation with the amount and distribution of the rainfall.

12. The tollage collections from the various canals for the last three years are given in the table following :—

YEAR.	Orissa Canals.	Midnapore Canal.	Hidgellee Tidal Canal.	Orissa Coast Canal.	Sone Canals.	Calcutta and Eastern Canals.	Total.
	Rs.	Rs.	Rs.	Rs.	Rs.	Rs.	Rs.
1884-85	52,784	1,19,797	41,382	.....	37,335	5,08,166	7,59,764
1885-86	64,083	1,25,331	52,143	13,663	41,712	(a) 4,97,578	7,94,520
1886-87	58,604	1,00,693	51,904	28,587	49,645	4,73,193	7,71,766

(a) In last year's Resolution Rs. 10,025 on account of demurrage was omitted and Rs. 26,286, miscellaneous receipts, wrongly added. The figure has therefore been reduced by the difference, viz., Rs. 16,261.

There is a decrease in tollage collections on all canals except the Sone and Orissa Coast. On the latter the increase is due to a further length of 55 miles having been temporarily opened for traffic. The whole length has been opened out during the current year, and the canal route from Gewankally on the Hooghly through to Cuttack is now established.

13. The causes that have led to a diminution in the receipts are chiefly the depression in the rice and jute trade, and do not point to any permanent decline in the traffic. The receipts on the Calcutta and Eastern Canals were also affected by alterations in tolls. In Orissa the traffic was to some extent impeded by the low level of the water in the Kendrapara and High Level Canals, but is also due to the falling off in the exports of rice from the Central Provinces on account of absence of floods in the Mahanadi.

14. In the Nuddea Rivers the receipts are higher than those of the previous four years, the cause being attributed to the favourable state of the channels and to an increase in trade generally.

15. With the exception of the revenue report of the Superintending Engineer of the South-Western Circle, all the reports were received with fair punctuality. In the case of the South-Western Circle the report was delayed owing to the ill-health of the Superintending Engineer. There was an improvement in the date of receipt of the Examiner's Finance Accounts.

ORDER—Ordered that a copy of this Resolution and of the note and its accompaniments be submitted to the Government of India, in the Public Works Department, for information; also that copies be forwarded to the Appointment, Revenue, and Financial Departments of this Government; the Board of Revenue, Lower Provinces; the Commissioners of the Presidency, Burdwan, Patna and Orissa Divisions; the Collectors of the 24-Pergunnahs, Nuddea, Hooghly, Midnapore, Burdwan, Patna, Shahabad, Gya, Sarun, Cuttack and Balasore; the Superintending Engineers of the Orissa, South-Western and Sone Circles; and the Examiner of Public Works Accounts, Bengal, for information.

By order of the Lieutenant-Governor of Bengal,

C. W. I. HARRISON, LIEUT.-COL., R.E.,
Offg. Joint-Secretary to the Govt. of Bengal,
P. W. Dept.

Government of Bengal.

PUBLIC WORKS DEPARTMENT,

IRRIGATION BRANCH.

REVENUE REPORT.

Note by LT.-COL. C. W. I. HARRISON, R.E., Chief Engineer, on the Canal Revenue Reports for the year 1886-87.

THE total capital outlay on Irrigation works, of which capital accounts are kept, amounted during the year 1886-87 to Rs. 8,77,529 for direct and Rs. 20,864 for indirect charges, thus:—

	Direct charges.	Indirect charges.	Total.
	Rs.	Rs.	Rs.
Famine relief and insurance (grant-in-aid to Orissa Coast canal) ...	84,000	...	84,000
Capital expenditure on Irrigation works not charged against Revenue ...	5,76,359	12,880	5,89,239
Minor works and Navigation, Imperial	—1,200	.....	—1,200
Ditto ditto, Provincial	2,18,370	7,984	2,26,354
Ditto ditto, Provincial	...	...	...
Total ...	8,77,529	20,864	8,98,393

2. The total capital outlay at the end of the year 1886-87, including indirect charges, was as follows:—

	Direct charges.	Indirect charges.	Total.
	Rs.	Rs.	Rs.
<i>Major Irrigation Works.</i>			
Productive Public Works ...	5,75,63,328	16,27,981	5,91,91,309
<i>Minor Works and Navigation.</i>			
Ordinary Revenue—Imperial ...	6,84,966	90,889	7,75,855
Ditto —Provincial ...	87,01,613	1,76,797	88,78,410
Protective grants—Imperial ...	8,66,000	.....	8,66,000
Total ...	6,78,15,907	18,95,667	6,97,11,574

3. The following statement shows the above outlay divided under the different projects:—

WORKS.	DURING 1886-87.			TO END OF 1886-87.		
	Direct charges.	Indirect charges.	Total.	Direct charges.	Indirect charges.	Total.
<i>Major Irrigation Works.</i>	Rs.	Rs.	Rs.	Rs.	Rs.	Rs.
Orissa Canals ...	4,34,753	8,990	4,43,743	2,25,07,780	5,06,853	2,30,14,633
Midnapore Canal ...	4,887	(—) 6	4,881	82,61,992	1,83,576	84,45,568
Hidgellee Tidal Canal ...	.....	.....	.....	17,95,489	44,807	18,40,296
Sone Canals ...	1,36,719	3,896	1,40,615	2,49,98,067	8,92,745	2,58,90,812
Total ...	5,76,359	12,880	5,89,239	5,75,63,328	16,27,981	5,91,91,309
<i>Minor Works and Navigation —Imperial.</i>						
Tirhoot Project ...	.....	.....	.....	5,31,425	74,650	6,06,075
Damoodah Project ...	(—) 1,200	.....	(—) 1,200	1,53,541	16,239	1,69,780
Total ...	(—) 1,200	.....	(—) 1,200	6,84,966	90,889	7,75,855
<i>Minor Works and Navigation —Provincial.</i>						
Calcutta and Eastern Canals	5,156	137	5,293	51,64,223	59,051	52,23,274
Orissa Coast Canal ...	*2,97,214	7,817	3,05,061	*37,34,160	90,563	38,24,723
Sarun Canals ...	.....	.....	.....	6,69,230	27,183	6,96,413
Total ...	3,02,370	7,954	3,10,354	95,67,613	1,76,797	97,44,410
Grand Total ...	8,77,529	20,864	8,98,393	6,78,15,907	18,95,667	6,97,11,574

* Inclusive of expenditure from protective grants of Rs. 84,000 during 1886-87, and of Rs. 8,66,000 to end of 1886-87.

REVENUE.

4. The following statement shows the total receipts, working expenses and charges for interest, in respect of the works which are classed as Major Irrigation Works, during 1886-87 and four previous years:—

PARTICULARS.	1886-87.	1885-86.	1884-85.	1883-84.	1882-83.
	Rs.	Rs.	Rs.	Rs.	Rs.
Receipts from all sources ...	13,86,629	15,84,935	13,07,521	11,59,841	13,17,729
Working expenses (direct charges) ...	13,32,600	11,53,416	11,79,758	10,69,394	11,50,028
Net revenue ...	54,029	4,31,519	1,27,763	1,00,447	1,67,701
Charge for interest ...	22,91,006	22,66,710	22,29,979	21,77,670	21,32,152
Deficit ...	22,36,977	18,35,191	21,02,216	20,77,223	19,64,451
Indirect charges debitable to Revenue	68,487	55,538	55,301	49,974	43,426
Total deficit ...	22,97,464	18,90,729	21,57,517	21,27,197	20,07,877
Rate per cent on capital outlay ...	3.88	3.23	3.72	3.74	5.63

INTEREST.

5. The total amount of interest payable to the Imperial Treasury on account of Major Irrigation Works for the year is Rs. 22,91,006.

FINANCIAL RESULTS.

6. The following statement shows the financial results of both Major and Minor Irrigation Works, of which Capital and Revenue accounts are kept up, to the close of the year 1886-87:—

	Maj. Irrigation Works.	Minor Works and Navigation.
	Rs.	Rs.
Direct revenue ...	1,27,67,926	1,92,56,933
Working expenses (direct charges) ...	1,29,84,941	72,85,212
Results on direct charges only ...	Loss ... 2,17,015	Profit ... 1,19,71,721
Indirect charges debitable to Revenue ...	6,60,778	1,73,969
Results on both direct and indirect charges ...	Loss ... 8,77,793	Profit 1,17,97,752
Charges for interest on capital ...	2,94,10,632	Not calculated.
Net results, including interest to end of 1886-87 ...	Loss ... 3,02,88,425	

The gross capital invested in Major Irrigation Works to the end of the year 1886-87, inclusive of indirect charges, being Rs 5,91,91,309, the loss aggregated 51.17 per cent. of the capital to end of that year. There is at present no indirect revenue or enhanced land revenue in Bengal, and consequently no assistance is obtained from this source as in other provinces.

7. The following abstract shows the expenditure on and receipts from Irrigation, Navigation and Agricultural Works during the year 1886-87, as compared with those of the preceding year:—

EXPENDITURE.				1886-87. Rs.	1885-86. Rs.	EXPENDITURE.
35.—Construction of Protective Irrigation Works—						
Imperial	...	...	...	84,000	82,000	
42.—Major Works—Working Expenses—						
Provincial	...	...	...	13,32,600	11,53,416	
43.—Minor Works and Navigation—						
Irrigation and Navigation Works—						
Imperial	...	...	...	(—)1,200	(—)1,200	
Provincial	...	...	...	6,04,377	7,42,171	
Total				6,03,177	7,40,971	
Agricultural Works—						
Imperial	...	...	...	5,45,436	5,42,744	
Provincial	...	...	...	84,340	3,13,458	
Contributions	...	...	...	13,605	6,871	
Total				6,43,381	8,63,073	
48.—Capital expenditure on Irrigation Works						
not charged against Revenue				5,76,359	6,38,487	
Total				32,39,517	34,77,947	
RECEIPTS.				Rs.	Rs.	RECEIPTS.
XXIX.—Major Works—Direct Receipts—						
Provincial	...	...	...	13,86,629	15,84,935	
XXX.—Minor Works and Navigation—						
Irrigation and Navigation Works—						
Provincial	...	...	...	7,29,629	7,18,974	
Agricultural Works—						
Imperial	...	...	...	4,860	6,804	
Provincial	...	...	...	3,059	2,797	
Total				21,24,177	23,13,510	

8. The areas irrigated during the year 1886-87, and the four preceding years, by the Major Irrigation Works, are shown in the following statement:—

YEAR.	ORISSA CANALS.				MIDNAPORE CANAL.				SONE CANALS.				TOTAL.			
	Khari.	Rabi.	Perennial.	Total.	Khari.	Rabi.	Perennial.	Total.	Khari, including 5-year leases.	Rabi.	Perennial.	Total.	Khari.	Rabi.	Perennial.	Total.
	Acres.	Acres.	Acres.	Acres.	Acres.	Acres.	Acres.	Acres.	Acres.	Acres.	Acres.	Acres.	Acres.	Acres.	Acres.	Acres.
1886-87	78,115	2,440	154	77,709	69,762	...	...	69,762	239,916	16,662	11,626	268,204	384,793	19,102	11,780	415,675
1885-86	70,663	1,608	171	72,339	70,604	...	...	70,604	271,483	50,610	10,517	332,570	412,390	52,215	10,698	475,513
1884-85	54,181	1,904	197	57,372	60,294	...	...	60,294	285,841	77,558	5,202	370,601	407,316	5,552	9,459	497,327
1883-84	67,086	1,381	344	68,769	97,919	...	...	97,919	244,578	60,304	6,732	350,614	389,431	100,096	7,076	497,293
1882-83	115,530	4,100	308	123,028	101,939	...	...	101,939	342,550	15,999	15,275	173,824	575,019	20,009	15,673	608,791

ORISSA CANALS.

9. The Capital, Interest and Revenue accounts of these canals are given below:—

1.—CAPITAL ACCOUNT.

CAPITAL ACCOUNT.

HEADS OF ACCOUNT.				Outlay during 1886-87	Outlay to end of 1886-87.
DIRECT CHARGES.				Rs.	Rs.
I.—Works	...	...	...	3,40,891	1,60,67,993
II.—Establishment	...	...	...	64,111	41,30,732
III.—Tools and plant	...	...	...	14,904	19,69,046
IV.—Suspense accounts	...	...	...	14,906	1,48,739
V.—Loss by exchange	...	...	...	.....	2,68,070
Total				4,34,812	2,25,84,580
VI.—Less receipts on Capital account	...	...	...	59	76,800
Not total				4,34,753	2,25,07,780
INDIRECT CHARGES					
Capitalization of abatement of land revenue	..			14	32,426
Leave and pension allowances	...	...	...	8,976	4,74,427
Total indirect charges				8,990	5,06,853

2.—INTEREST ACCOUNT.

			Rs.
Interest charges to end of 1885-86	...	...	1,10,54,035
Ditto for 1886-87	...	...	8,91,616
Total	...	...	1,19,45,651

3.—REVENUE ACCOUNT (Actuals).

REVENUE
ACCOUNT.

EXPENDITURE			RECEIPTS.	
	During 1886-87	To end of 1886-87.	During 1886-87.	To end of 1886-87.
	Rs.	Rs.	Rs.	Rs.
I — Works, Maintenance and Repairs.				
Works (extensions and improvements)	.....	1,644	Water-rates ...	96,976
Maintenance and repairs	3,52,761	29,99,414	Navigation ...	67,048
Compensation ...	.....	53	Miscellaneous ...	15,587
Establishment (including direction and accounts) ...	81,117	6,59,259	Direct revenue realized in England ..	... ..
Tools and plant ...	15,486	1,76,766		
Profit and loss ...	.....	640		
Total ...	4,49,364	38,37,776		
II.—Revenue management.				
Irrigation establishment	37,005	5,86,261		
Navigation ditto	15,471	1,44,872		
Total ...	52,476	7,31,133		
III.—Refunds of Revenue.				
	92	2,996		
IV.—Direct expenditure in England				
	.....	6,945		
Total ...	5,01,932	45,78,850		
			Total receipts ...	1,79,611
			Deficit ..	3,22,321
			Total ...	5,01,932
				25,68,806
				20,10,044
				45,78,850

The interest charges to end of 1885-86 have been revised in accordance with Government of India, Public Works Department Resolution No. 159AG, dated 8th July 1887, and the revised charges have been adopted in preparing the account for 1886-87.

10. The expenditure and earnings for the year 1886-87 are given below. **EARNINGS.**
Direct charges only are shown:—

EXPENDITURE.	Amount.	EARNINGS.	Amount.
<i>I.—Works, Maintenance and Repairs.</i>	Rs.		Rs.
Works (extensions and improvements) ...	...	Water-rates ...	1,25,676
Maintenance and repairs ...	3,52,761	Navigation ...	67,048
Establishment (including direction and accounts) ...	81,117	Miscellaneous ...	15,587
Tools and plant ...	15,486		
Total ...	4,49,364		
<i>II.—Revenue management.</i>			
Irrigation establishment ...	37,005		
Navigation ditto ...	15,471		
Total ...	52,476	Total earnings ...	2,08,311
<i>III.—Refunds of revenue</i> ...	92	Deficit ...	2,93,621
Total working expenses ...	5,01,932	Total ...	5,01,932

The earnings of the year include assessments made during the year under review on account of previous years, and the amounts legally due of the assessments of 1886-87.

11. The lengths of canals and distributaries in operation at the close of the year 1886-87 are given in the following statement:—

LENGTHS OF CANALS

NAME OF CANAL.	Navigable canals.	Canals for irrigation only.	Distributaries and village channels.	Area protected from flood.	Area under command.	Area provided with distributaries.	Area irrigated, 1886-87.	Percentage of area irrigated to area provided with distributaries.
	Miles.	Miles.	Miles.	Acres.	Acres.	Acres.	Acres.	
Kendraparah system.	39	.....	333½	129,421	101,110	87,300	39,714	41.1
Kendraparah extension	15	.....	.....	8,960	7,000	.....	.....	.....
Gobri (including extension).	21	.....	.....	27,251	53,250	.....	.....	.....
Pattumondree	.....	47	32½	65,000	51,250	9,387	.....	.....
Taldundah system.	27	.....	7½	19,520	15,250	15,250	18,085	32.8
Machkong	4	15	12½	44,928	71,000	41,000	.....	.....
High Level Canal, Range I	33	.....	131½	80,128	48,815	47,780	12,412	25.9
Total Mahanuddee Series	189	62	691½	375,808	348,315	204,317	70,811	35.1
High Level Canal, Range II	12½	.....	.....	.....	70,000	.....	407	.....
High Level Canal, Range III	19	.....	.....	.....	57,500	.....	6,491	.....
Total Brahmini-Byturni Series	31½	.....	.....	.....	127,500	.....	6,908	.....
Total Orissa Canals	170½	62	691½	375,808	475,815	201,317	77,709	.....

In comparison with the year 1885-86, the total length of canals for irrigation and navigation remained the same, but a length of $46\frac{3}{4}$ miles of distributary and village channels was added during the year, providing for an additional area of 11,437 acres.

12. The rainfall of the year 1886-87 and of the previous year is shown in table No. IVE. From this it appears that the average fall throughout the canal area was, both for the kharif and the year, greater than that of the year 1885-86.

RAINFALL.

RAINFALL.

The average rainfall in the immediate neighbourhood of the Orissa canals, calculated on the figures at thirteen stations for eighteen years, is 56.28 inches. The fall of the year 1886-87 at the same stations was 60.07 inches, or 3.79 inches above the average.

From statistics of rainfall in the upper districts drained by the Mahanadi, it appears that the average fall for the year was 16.90 inches less than that for the year 1885-86, and 12.97 inches less than the average of the last six years, so that the volume passing down this river was much less than usual.

The following statements are deduced from the subsidiary rainfall returns given by the Superintending Engineer and from previous reports:—

		AVERAGE OF THIRTEEN STATIONS.				
		1882-83.	1883-84.	1884-85.	1885-86.	1886-87.
		Inches.	Inches.	Inches.	Inches.	Inches.
Kharif season	July	17.81	13.03	9.58	10.68	10.05
	August	8.71	9.89	7.45	10.44	9.86
	September	8.91	9.77	11.29	10.08	14.66
	October	7.98	1.78	5.06	4.84	6.87
	Total	43.41	34.27	33.38	36.04	42.04
Rabi season	November	1.55	0.15	0.23	1.26	1.56
	December ... ..	.....	1.53	0.07	1.20	0.45
	January ... ..	.....	0.09	0.15	0.39	0.48
	February	0.30	1.58	2.63	0.05	.....
	Total	1.94	3.35	3.08	2.90	2.49
Whole year ..		55.98	57.18	50.42	51.49	60.05

YEAR.	MAHANADDY SERIES.									BRAHMINI-BYTURNI SERIES.								
	Kendraparah system.			Taldumdah system.			High Level Canal, Range I.			High Level Canal, Range II.			High Level Canal, Range III.					
	Kharif.	Rabi.	Whole year.	Kharif.	Rabi.	Whole year.	Kharif.	Rabi.	Whole year.	Kharif.	Rabi.	Whole year.	Kharif.	Rabi.	Whole year.			
	In.	In.	In.	In.	In.	In.	In.	In.	In.	In.	In.	In.	In.	In.	In.	In.	In.	In.
1884-85	35.65	4.75	54.75	29.35	2.15	47.85	32.24	2.45	52.15	31.78	2.94	46.24	30.24	2.80	48.34			
1885-86	34.50	1.80	52.64	36.44	2.82	50.42	31.63	3.11	49.88	34.14	2.64	55.41	30.20	2.80	55.17			
1886-87	39.97	2.60	63.50	42.80	3.97	64.78	41.67	1.53	63.16	44.02	1.48	62.18	42.72	2.08	64.79			

The above show that, as regards the kharif season, the rainfall was everywhere abundant and above the average, more especially in the month of September.

13. The following statement shows the areas irrigated and yearly rainfall since 1877-78:—

IRRIGATION.

YEAR.	Kharif.	Rabi.	Perennial.	Total.	Rainfall.
	Acres.	Acres.	Acres.	Acres.	Inches.
1877-78 ...	95,088	3,071	336	98,495	47.94*
1878-79 ...	105,500	5,517	233	111,250	61.98*
1879-80 ...	105,186	3,616	236	109,038	60.45*
1880-81 ...	112,171	4,877	173	117,221	85.10*
1881-82 ...	126,611	5,403	264	132,278	56.92†
1882-83 ...	128,530	4,100	398	133,028	59.03†
1883-84 ...	47,035	1,381	344	48,760	57.21†
1884-85 ...	54,181	2,994	197	57,372	50.40†
1885-86 ...	70,563	1,605	171	72,339	52.59†
1886-87 ...	75,115	2,440	154	77,709	60.07†

* Mean of observations in Cuttack and Murgughal.

† Ditto ditto at 13 stations throughout canal irrigated area.

14. The area irrigated is also that assessed during the year, showing an improvement of 5,370 acres chiefly in five-year leases, and there was a considerable decrease in the area illicitly irrigated. The statement below gives a comparison for three years.

				1886-87.	1887-88.	1884-85.
				Acres.	Acres.	Acres.
Karif	...	Five-year leases...	...	73,699	65,762	51,241
		Annual leases	...	68	50	20
		Unauthorized irrigation	...	1,354	4,754	1,570
Rabi	...	...	...	2,439	1,604	2,915
Perennial	...	Sugarcane	...	149	169	196
Total, including unauthorized irrigation				77,709	72,339	58,912
Total, excluding unauthorized irrigation				76,355	67,585	57,372

In the above statement 1,148 acres free irrigation of chaukidar's jagirs is not included, the total area actually irrigated being therefore 78,857 acres. This area ought to have been included in the assessments in order to make the assessed and irrigated areas agree, and then shown as a free grant. It cannot now be included in the returns for the year under review, as the details are wanting, but will be in future. The area leased is given by the Deputy Revenue Superintendent as 87,394 acres, but of this total, 13,627 acres, inclusive of the area of chaukidar's jagirs, were excluded from assessment. The practice in Orissa for three years past has been to delay the issue of the demand statements until it was finally ascertained what areas should be excluded from assessment for such reasons as non-receipt of water, failure of crops, &c. Such areas, more especially in the case of five-year leases, would more properly be shown as remissions, the demand being made at the time laid down in the rules on the area as leased. There does not appear to have been any authority for the procedure adopted in this matter by the Canal Revenue Department, and it is opposed to the spirit of the rules passed under the Irrigation Act.

15. There is a considerable decrease in the unauthorized or surreptitious irrigation, as will be seen from the foregoing statement, which decrease, according to the Deputy Revenue Superintendent, is "an index that there was little or no water to spare, especially when it was most wanted on leased areas." What this means is not very clear; but, apparently, the conclusion to be drawn is that, had there not been a scarcity of water, the area of unauthorised irrigation would have been as large as usual; and, if this be the case, it neither reflects credit on the administration, nor does it give hope that the people are taking more kindly to lawful modes of irrigation.

16. The total of the area 87,394 acres, shown as leased by the Deputy Revenue Superintendent, cannot be considered correct; since for some years past 8,465 acres, which were included in five-year leases in 1883, have been regularly excluded from assessment as non-irrigable, instead of revision being made of the original leases. The area excluded from assessment as having suffered loss or on account of non-receipt of water in consequence of the breach in the Mahanadi weir was 4,014 acres.

17. The assessments of water-rates during the year under review are compared below with those of the two previous years:—

				1886-87.	1887-88.	1884-85.
				Rs.	Rs.	Rs.
Water-rates	...	...	...	1,25,676	1,05,019	82,185

These figures do not represent the assessments of the crops irrigated in each year; they show the assessments which are legally due within the year, and include a portion of the assessments of the crop of the year and a portion of the assessments of the crop of the previous year, and some arrears for still earlier years.

Of the amount assessed during 1886-87, the sum of assessments on account of previous years was Rs. 50,530, and that on account of the current year Rs. 75,146.

The increase over the two previous years is due to the steady increase in the kharif irrigation, that is to say, practically, five-years' leases; for a portion of the increase is due to the improvement in the year under review as compared with 1885-86; and a portion to the assessments for 1885-86 falling due in 1886-87 being larger than the assessments for 1884-85 falling due in 1885-86.

COMPLAINTS.

18. No information is afforded regarding the number of complaints, their nature, or how disposed of. It is, however, clear that they exist from the fact that assessment papers are delayed for the correction of mistakes, and that unauthorised irrigation is always a source of complaint and friction. In future detailed information regarding complaints, in connection both with irrigation (authorised and unauthorised) and with miscellaneous matters, should be given. Complaints in connection with unauthorised irrigation should be clearly distinguished from the rest.

COLLECTIONS AND REMISSIONS.

19. The balance of water-rates outstanding on the 1st April 1886 was Rs. 64,884, and the amount falling due during 1886-87, being Rs. 1,25,676, the amount for recovery was Rs. 1,90,560. Of this sum, the cash realisations during the year aggregated Rs. 96,976, and the remissions amounted to Rs. 6,126. The total amount adjusted during the year under review being Rs. 1,03,102, the balance outstanding on the 1st April 1887 was Rs. 87,458. This increase of the unrealised balance of assessments is in a great measure due to the breach in the Mahanadi anicut. The mere fact of the breach, even where damage to crops had not occurred, was considered a sufficient reason for lessees to be unwilling to pay the assessments on unirrigated areas, and even when water had been supplied they made the breach a plea for withholding payment. But for this accident, it is probable that the voluntary payments would have been more numerous, and the revised estimate of Rs. 1,44,000 realised.

The following statement shows the collection operations of the year in a form similar to that given in last year's report:—

	OUTSTANDINGS OF ALL YEARS UP TO AND INCLUDING 1886-87.			DEMANDS DUE IN 1886-87 FOR THE IRRIGATION OF THAT YEAR.		
	Rupees.	Percentage of demands outstanding on 31st March 1886.	Rupees.	Rupees.	Percentage of demands for the year.	Rupees.
Outstandings at end of 1885-86 with assessments made in 1886-87	.....	100.0	1,15,414	.....	100.0	75,145
Adjustments made { Collections	73,288	63.5	23,687	23,687	31.5	23,739
in 1886-87. { Remissions	6,074	5.3		52	1	
Total adjustments	.....	68.8	79,362	.....	31.6	23,739
Outstanding on 1st April 1887	.....	31.2	36,052	.....	68.4	51,407

The outstandings on account of 1886-87 and previous years on the 1st April 1887 were respectively as below:—

	Rs.
1881-82	509
1882-83	1,758
1883-84	4,168
1884-85	9,416
1885-86	20,200
1886-87	51,407
Total arrears	87,458

The collection of the older arrears continues satisfactory, and there is again an improvement in the reduction of amounts remitted.

REVENUE SYSTEM.

20. The revenue system of the Orissa canals still remains the same, and the work of assessment of water-rates has not yet been made over to the officers of the Public Works Department. The delay was due in a great measure to the difficulty of re-arranging the old establishments. An enquiry is now being held into the working of the Sone canals system, and until such time as the report of the Commission now sitting has been considered, the introduction of any change does not appear advisable.